


# COLLEGE CATALOG 2017-2018 



## ACCREDITATION

Waubonsee Community College is accredited by The Higher Learning Commission, 230 South LaSalle Street, Suite 7-500, Chicago, IL 60604, (800) 621-7440, and is recognized by federal and state agencies administering financial aid.

Since 2003, Waubonsee has been participating in the Higher Learning Commission's Academic Quality Improvement Program (AQIP), which seeks to infuse the principles and benefits of continuous improvement into the culture of colleges and universities in order to assure and advance the quality of higher education.
Approval: Waubonsee Community College is recognized by the Illinois Community College Board, Illinois Board of Higher Education and the U.S. Department of Education.

## Accredited Career Programs:

## Addictions Counseling Program

Accreditation: Illinois Alcohol and Other Drug Abuse Professional Certification Association, Inc. (IAODAPCA): preparatory and advanced accreditation

## Art and Graphic Design Programs

Accreditation: National Association of Schools of Art and Design (NASAD)

## Auto Body Repair Program

Accreditation: National Automotive Technicians Education Foundation (NATEF)

## Automotive Technology Program

Accreditation: National Automotive Technicians Education Foundation (NATEF)

## Emergency Medical Technician - Paramedic

Accreditation: Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP)

## Health Information Technology Program

Accreditation: Commission on Accreditation of Health Informatics and Information Management Education (CAHIIM)

## Medical Assistant Program

Accreditation: Medical Assisting Education Review Board (MAERB)

## Nursing Program

Accreditation: Accreditation Commission for Education in Nursing (ACEN)

## Surgical Technology Program

Accreditation: Accreditation Review Council on Education in Surgical Technology and Surgical Assisting (ARC/STSA)

Illinois Community College District 516
Circulation: The Waubonsee Community College Catalog is published annually by the Marketing and Communications Department. For additional copies of this or other publications, call us. We welcome comments and suggestions. This catalog is provided to you compliments of the college.

# College Catalog 2017-2018 

## WAUBONSEE COMMUNITY COLLEGE

is a two-year public community college providing education and training services for individuals in District 516.

This catalog is in effect for the academic year 2017-2018.

## OUR VISION

Waubonsee Community College opens the door of knowledge, sparks imaginations, and enlightens lives through learning. We welcome the diverse abilities, goals, and experiences of individuals standing on the threshold of discovery. Our success is defined by the dreams we help shape, the opportunities we help design, and the futures we help create.

## OUR VALUES

Quality: We constantly redefine what it means to be "the best," seeking to improve in every area and exceed the expectations of those we serve.
Value: We focus every resource directly on the search for learning, creating tangible benefits in everything we do.
Innovation: We are actively engaged on the frontiers of education, continuously improving the learning environment for our students and communities.
Service: We view the world from the perspective of those we serve, anticipating needs and striving to exceed expectations while demonstrating a caring, knowledgeable, consistent connection with each individual every time they meet us.

Accessibility: We remove barriers to learning formed by time, geography, education, culture, experience or beliefs to provide a full range of quality educational opportunities for all who can benefit.

## OUR MISSION

Waubonsee Community College is a public, comprehensive community college that was organized in 1966 as mandated by the Illinois Community College Act to provide education and training services for individuals in portions of Kane, Kendall, DeKalb, LaSalle and Will counties of District 516.

The philosophy of Waubonsee Community College is based on the premise that education is the cornerstone of a literate, democratic society; that learning is a lifelong process; and that the pursuit of knowledge must be supported by institutional policies that demonstrate the values of quality, value, innovation, service and accessibility.

## Our Commitments

- Provide quality educational programs and services that are academically, geographically, financially, technologically and physically accessible to meet the educational and training needs of a diverse, multicultural population and the organizations within our community.
- Maintain institutional policies, programs, practices and efforts that provide an emphasis on a learning-centered college for students and the community.
- Develop the intellectual, physical, social, cultural and career potential of the individual.
- Promote diversity in faculty, staff and student recruitment; staff development; and cultural enrichment activities.
- Contribute to the economic, workforce, social, recreational and cultural quality of life of the community.
- Cooperate with other local, state and national organizations, and provide leadership that will enhance educational services and avoid duplication of services.


## Our Programs and Services

Transfer Programs: Associate degree education consisting of communications, social and behavioral sciences, physical and life sciences, mathematics, humanities and fine arts, education, engineering, and other pre-professional fields designed to prepare students for transfer to baccalaureate degree granting institutions.
Occupational Programs: Business, health care, technical and professional education consisting of associate degrees, certificates, courses, workshops and seminars designed for career, entry-level employment, transitioning, retraining, and/or upgrading of skills to meet current and emerging employment needs and trends.
Developmental Education: Courses, programs and services designed to assist academically underprepared students to be successful in the next level of education, including reading, mathematics, writing, college success, literacy, high school equivalency exam preparation (HSE), Adult Basic Education (ABE) and English as a Second Language (ESL).
Workforce Development: Courses, programs and services designed to meet the workplace training needs of both individuals and organizations with an emphasis on skill building and improved productivity.
Community Education: Courses, trips, tours, special events and experiences designed for the personal enrichment of the lives of learners of all ages and to promote lifelong learning.
Student Services: Services designed to meet the needs of a diverse student population that include counseling, advising, transfer planning, admissions, registration and records, assessment, financial aid, career development, student life programming, intercollegiate athletics and assistance for those students with disabilities.

## Our Program Support

Instructional Support: Services designed to facilitate and provide support to the instructional process, including alternative delivery systems such as online courses; the use of computer technology; the libraries; the Center for Teaching, Learning and Technology; and media and learning laboratories.
Administrative Support: Organizational support that provides services for staff selection and development, financial services, facilities, operational management, technology advancements and training, research, planning, marketing and communications.
Community Support: Service to communities, organizations and businesses may be provided by the college to meet local needs. These combined efforts may include programming in the community, workforce development and partnership activities that will improve the quality of life.
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## Campus Safety

Waubonsee Community College is committed to providing a safe and secure campus environment for all students, faculty, staff and community members. Emergency Preparedness and Safety: A Guide for Students and Community Members provides basic information on what to do in a variety of possible emergency situations on campus. This guide is available for download at www.waubonsee.edu/safety. Printed copies of the guide are also available from the Counseling, Admissions, and Registration and Records departments.

In case of emergency, please call 911. For non-emergency situations, Waubonsee Campus Police may be reached by calling (630) 466-2552 at the Sugar Grove Campus and (630) 906-4142 at the Aurora Downtown Campus. The Waubonsee Campus Police Office is located in Dickson Center on the Sugar Grove Campus and at the front desk at the Aurora Downtown Campus.

## ACCREDITATION

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## APPROVAL:

Waubonsee Community College is approved by the Illinois Community College Board, Illinois Board of Higher Education and the U.S. Department of Education.



Christine J. Sobek, Ed.D.
President

Welcome to Waubonsee Community College. Our collective identity as a college is formed by the diverse students, faculty, staff, board and community members who choose to be part of our learning community. With that in mind, I'd like to share with you what I have observed about the Waubonsee learning community throughout my career.

As part of my efforts to get to know as many of our Waubonsee family as I can, I meet with each new full-time employee shortly after they start working at Waubonsee. What I hear most often during these meetings is their desire to make a difference for students and in their communities. This is more than a job - it is their passion. As I meet with various students and student groups, I find the same theme. Whatever their motivation, our students want to make a difference for themselves, for their families, for their communities, and for the world.

I am fortunate to hear the stories of individuals who were inspired, who were challenged and who were supported by someone at Waubonsee Community College. And I am equally fortunate to hear the stories of those who inspire and challenge us like our 2016 Outstanding Alumnus recipient, Puamuh Ghogomu, who serves as a role model for the many students who come to the college looking to pursue their college degree while adapting to a new country.

Our alumni are changing the world. Many were the first in their family to graduate from college. Many transferred to four-year institutions to complete bachelor's, master's and doctoral degrees. Waubonsee alumni have as varied careers as the nearly 43,000 certificates and degrees awarded in our 50 -year history. It is an honor and a privilege to be a part of the Waubonsee Community College family.

We all look forward to helping our students achieve their hopes and dreams. Best wishes for a successful and rewarding academic journey.

Sincerely,


Christine J. Sobek, Ed.D., President

- @WCCPresident

Waubonsee Community College offers students the opportunity to take classes in a wide variety of areas. Coursework in credit classes can be designed for very general or very specific educational goals. Requirements and suggested coursework for each degree are explained in the appropriate catalog section. Degrees and certificates offered include:

## TRANSFER EDUCATION

Associate in Arts Degree (AA)
Associate in Science Degree (AS)
Associate in Engineering Science Degree (AES)
Associate in Fine Arts Degree (AFA)
See degree requirements page 22.
See the list of example areas of concentration page 34.

## CAREER AND TECHNICAL EDUCATION

Associate in Applied Science Degree (AAS)
Certificate of Achievement
See degrees and certificates listed page 76.

## GENERAL EDUCATION

Associate in General Studies Degree (AGS)
General Studies Certificate
See degree requirements page 67.
The Disciplines listed below indicate the varied areas of study offered at Waubonsee, although students are not limited to these options. Refer to each listing of degrees, certificates and areas of concentration later in this catalog.

## DISCIPLINES

Course descriptions begin on page 155.

Accounting
Anthropology
Apprentice Training Program
Art
Astronomy
Auto Body Repair
Automation Technology
Automotive Technology
Biology
Business Administration
Chemistry
College SuccessTopics
Communications
Computer Aided
Design and Drafting
Computer Information Systems
Construction Management
Criminal Justice
Disability Studies
Early Childhood Education
Earth Science
Economics
Education
Electronics Technology
Emergency Medical Technician
Engineering
English
Film Studies
Finance and Banking
Fire Science

Foreign Languages
Chinese, French, German, Japanese, Spanish
Geography
Geology
Graphic Design
Health Care Interpreting
Health Education
Health Information Technology
Heating, Ventilation and
Air Conditioning
History
Human Services
Humanities
Independent Study
Industrial Technology
Interdisciplinary Studies
InterpreterTraining
Laboratory Technology
Legal Interpreting
MachineToolTechnology
Management
Marketing
Mass Communication
Mathematics
Medical Assistant
Military Science
Music
Nurse Assistant
Nursing

Patient Care Technician
Philosophy
Phlebotomy
Physical Education
Physics
Political Science
Psychology
Reading
Real Estate
Religious Studies
Sign Language
Social Science
Sociology
Surgical Technology
Sustainability
Theatre
Therapeutic Massage
Welding Technology
World Wide Web

This catalog documents guidelines for transfer degree areas of concentration and specific curriculum for career education degrees and certificates. Listed below are example transfer degree areas of concentration and career education curricular areas. Look in the appropriate section for more specific details.

## TRANSFER DEGREE AREAS OF CONCENTRATION

See the transfer degree guidelines starting on page 33.

Art
Biology
Business
Accounting/Management/
Finance/Marketing/Operations
Management
Chemistry
Clinical Laboratory Science
Communication
Computer Science
Criminal Justice
Early Childhood Education
Economics
Elementary Education
English
General Science
Geography
Geology
Graphic Art
History
Mass Communication
Mathematics
Music
Nursing
Philosophy
Physical Education
Physics
Political Science
Psychology
Secondary Education
Social Work
Sociology
Special Education
Sport Management

## CAREER ANDTECHNICAL EDUCATION AREAS

See the curriculum for each degree and certificate starting on page 74.

Accounting
ApprenticeTraining Program
Auto Body Repair
Automation Technology
Automotive Technology
Business Administration
Computer Aided Design
and Drafting
Computer Information Systems
Construction Management
Criminal Justice
Early Childhood Education
Emergency MedicalTechnician
Fire Science
Geographic Information Systems
Graphic Design
Health Care Interpreting
Health Information Technology
Heating, Ventilation
and Air Conditioning
Human Services
InterpreterTraining/Sign Language
Kinesiology
Laboratory Technology
Legal Interpreting
MachineToolTechnology
Management - Human Resources
Mass Communication
Medical Assistant
Music
Nurse Assistant
Paraprofessional Educator
PhlebotomyTechnician
Photography

Real Estate
Registered Nursing
SurgicalTechnology
Therapeutic Massage
Welding Technology
World Wide Web

Don't see your major? WCC associate degrees transfer to several additional majors as well. Check with Counseling for details.

## FALL SEMESTER 2017

Late registration begins ..... Aug. 14
(Last day to enroll in a course is prior to the first class meeting)
Orientation week for faculty and staff. Aug. 16-18
First day of classes - Monday ..... Aug. 21
Students withdrawn for nonpayment after this date must petition to re-enroll ..... Aug. 21
End of ALL refunds for 16 -week courses ..... Sept. 1
Withdrawals after this date from 16-week courses will appear on student transcripts. ..... Sept. 1
Labor Day break - Monday ..... Sept. 4
(Classes will not meet)
Weekend classes begin - Saturday Sept. 9
Last day to claim honor student status designation in a 16 -week course. ..... Sept. 18
Midsemester - last day to change audit enrollment status. Oct. 11
Spring semester registration begins at 8 a.m. ..... Nov. 6
Last day to enroll in a fall semester independent study or internship course. ..... Nov. 6
Thanksgiving break - Monday through Sunday ..... Nov. 20-26
(Classes will not meet)
Last day to withdraw from fall semester courses. ..... Nov. 27
Semester ends ..... Dec. 16
Grades due - noon,Tuesday ..... Dec. 19The above dates apply, in general, to traditional 16-week credit courses. Contact Registrationand Records for details concerning weekend courses, TBA courses or courses shorter than 14 weeks induration.

The college is closed on the following dates. Otherwise, the college is open and services are available during the standard hours of operation.

| ...................Tuesday, July 4, 2017 |  |
| :---: | :---: |
| , Day: | day, September 4, 2017 |
| Thanksgiving Holiday:.......................................... Wednesday, November 22 through |  |
|  | Sunday, November 26, 2017 |
| Winter Holiday: ....................................4:30 p.m., Friday, December 22, 2017 through |  |
|  | Monday, January 1, 2018 |
| E | ..Sunday, April 1, 2018 |
| Memorial D | onday, May 28, 2018 |
| dependen | Wednesday, July 4, 2018 |

## 2017

## August

| $\mathbf{S}$ | $\mathbf{M}$ | $\mathbf{T}$ | $\mathbf{W}$ | $\mathbf{T}$ | $\mathbf{F}$ | $\mathbf{S}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 | 3 | 4 | 5 |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 27 | 28 | 29 | 30 | 31 |  |  |

## September

| $\mathbf{S}$ | $\mathbf{M}$ | $\mathbf{T}$ | $\mathbf{W}$ | $\mathbf{T}$ | $\mathbf{F}$ | $\mathbf{S}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 1 | 2 |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 |

## October

| $\mathbf{S}$ | $\mathbf{M}$ | $\mathbf{T}$ | $\mathbf{W}$ | $\mathbf{T}$ | $\mathbf{F}$ | $\mathbf{S}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 30 | 31 |  |  |  |  |

## November

| $\mathbf{S}$ | $\mathbf{M}$ | $\mathbf{T}$ | $\mathbf{W}$ | $\mathbf{T}$ | $\mathbf{F}$ | $\mathbf{S}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 26 | 27 | 28 | 29 | 30 |  |  |

## December

| $\mathbf{S}$ | $\mathbf{M}$ | $\mathbf{T}$ | $\mathbf{W}$ | $\mathbf{T}$ | $\mathbf{F}$ | $\mathbf{S}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 1 | 2 |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 |  |  |  |  |  |  |

## 2018

## January

| $\mathbf{S}$ | $\mathbf{M}$ | $\mathbf{T}$ | $\mathbf{W}$ | $\mathbf{T}$ | $\mathbf{F}$ | $\mathbf{S}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 |
| 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 28 | 29 | 30 | 31 |  |  |  |


| February |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{S}$ | $\mathbf{M}$ | $\mathbf{T}$ | $\mathbf{W}$ | $\mathbf{T}$ | F | $\mathbf{S}$ |
|  |  |  |  | 1 | 2 | 3 |
| 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 |  |  |  |

## March

S M T W T F S 123
$\begin{array}{lllllll}4 & 5 & 6 & 7 & 8 & 9 & 10\end{array}$ $\begin{array}{lllllll}11 & 12 & 13 & 14 & 15 & 16 & 17\end{array}$ $\begin{array}{llllll}18 & 19 & 20 & 21 & 22 & 23\end{array}$ $\begin{array}{llllll}25 & 26 & 27 & 28 & 29 & 30\end{array}$

| April |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{S}$ | $\mathbf{M}$ | $\mathbf{T}$ | $\mathbf{W}$ | $\mathbf{T}$ | F | $\mathbf{S}$ |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 30 |  |  |  |  |  |


| May |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{S}$ | $\mathbf{M}$ | $\mathbf{T}$ | $\mathbf{W}$ | $\mathbf{T}$ | $\mathbf{F}$ | $\mathbf{S}$ |
|  |  | 1 | 2 | 3 | 4 | 5 |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 27 | 28 | 29 | 30 | 31 |  |  |


| June |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{S}$ | $\mathbf{M}$ | $\mathbf{T}$ | $\mathbf{W}$ | $\mathbf{T}$ | $\mathbf{F}$ | $\mathbf{S}$ |
| 3 |  |  |  |  | 1 | 2 |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 |

## July

| $\mathbf{S}$ | $\mathbf{M}$ | $\mathbf{T}$ | $\mathbf{W}$ | $\mathbf{T}$ | $\mathbf{F}$ | $\mathbf{S}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 30 | 31 |  |  |  |  |


| August |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{S}$ | $\mathbf{M}$ | $\mathbf{T}$ | $\mathbf{W}$ | $\mathbf{T}$ | $\mathbf{F}$ | $\mathbf{S}$ |
|  |  |  | 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 26 | 27 | 28 | 29 | 30 | 31 |  |

SPRING SEMESTER 2018
Late registration begins ..... Jan. 8
(Last day to enroll in a course is prior to the first class meeting) Orientation week for faculty and staff ..... Jan. 10-12
First day of classes - Tuesday ..... Jan. 16
Students withdrawn for nonpayment after this date must petition to re-enroll ..... Jan. 16
Weekend classes begin - Saturday ..... Jan. 20
End of ALL refunds for 16 -week courses ..... Jan. 26
Withdrawals after this date from 16-week courses will appear on student transcripts ..... Jan. 26
Last day to claim honor student status designation in a 16 -week course ..... Feb. 12
Summer semester registration begins at 8 a.m. ..... March 5
Midsemester - last day to change audit enrollment status. ..... March 7
Spring break - Monday through Sunday. ..... March 12-18
(Classes will not meet)
Last day to enroll in a spring semester independent study or internship course ..... April 2
Last day to withdraw from spring semester courses ..... April 23
Fall semester registration begins at 8 a.m. ..... May 7
Semester ends .....  May 11
Commencement ..... May 12
Grades due - noon,Tuesday ..... May 15
The above dates apply, in general, to traditional 16-week credit courses. Contact Registration and Recordsfor details concerning weekend courses, TBA courses or courses shorter than 14 weeks in duration.
SUMMER SEMESTER 2018
First day of classes - Monday (check individual course) ..... May 14
(Last day to enroll in a course is prior to the first class meeting)
Memorial Day break - Saturday through MondayMay 26-28
(Classes will not meet)
Weekend classes begin - Saturday ..... June 2
First day of regular summer session ..... June 4
Last day to enroll in a summer semester independent study or internship course ..... July 2
Independence Day break - Wednesday ..... July 4
(Classes will not meet)
Last day to withdraw from summer semester courses. ..... July 16
End of Session ..... July 28
Grades due - noon,Tuesday ..... July 31
Midterm

$\qquad$
determined by length (weeks) of course
Refunds

$\qquad$
determined by course beginning date and duration
(See the Bursar Office for details.)

Grades due
$\qquad$
immediately upon completion of each course

The above dates apply, in general, to traditional credit courses. Summer courses are offered with a variety of beginning and ending dates. Please refer to each individual course within the schedule for the correct beginning and ending dates. Contact Registration and Records for details.

## New students who have never attended Waubonsee before are required to complete the New Student Information Form found online at www.waubonsee.edu/nsif. <br> Please refer to the following steps to complete enrollment.

## New Noncredit Students

Students interested in Community Education or Workforce Development courses should complete the Noncredit Registration Form, which can be found in each semester's noncredit schedule and online at www.waubonsee.edu/register.

## New Credit Students (fulltime and/or degree-seeking)

Complete these steps if you want to do any of the following:

Enroll as a full-time student (12 credit hours or more)

Earn a degree or certificate
Receive financial aid
Transfer credit earned at another college to WCC**

STEP 1 Complete and submit the New Student Information Form, which can be found online at www.waubonsee.edu/nsif. Once this form is processed by Admissions, you will be issued an X-number that you will use throughout your Waubonsee career.
STEP 2 If you are interested, apply for financial aid. Visit www.waubonsee.edu/financialaid for step-by-step instructions.
STEP 3 Obtain proper course placement in English, reading and math based on your ACT, SAT or PARCC scores; placement testing results or previous coursework*. For details and test preparation tools, visit www.waubonsee.edu/placement. You must have an X-number to take Waubonsee's placement tests.
STEP 4 Complete your Electronic Registration and Planning (E-RAP) tutorial online, where you'll learn how to use the college catalog, credit schedule and your test scores to select courses. You'll then register and pay for your first semester of courses online. Access E-RAP through the mywcc portal at mywcc.waubonsee.edu.
STEP 5 If entering in the fall or spring, register for a free New Student Orientation session as you would for any other class.

## New Credit Students (part-time and not seeking a degree)

Complete these steps if you want to do any of the following:

Enroll as a part-time student
(less than 12 semester hours)
Don't meet any criteria for "new full-time and/or degree-seeking" category

STEP 1 Complete and submit the New Student Information Form, which can be found online at www.waubonsee.edu/nsif. Once this form is processed by Admissions, you will be issued an X-number that you will use throughout your Waubonsee career.
STEP 2 If you plan to enroll in an English or math course, obtain appropriate placement based on your ACT, SAT or PARCC scores; placement testing results or previous coursework*. For details and test preparation tools, visit www.waubonsee.edu/placement. You must have an X-number to take Waubonsee's placement tests.
STEP 3 Meet with an Admissions Advisor and complete Electronic Registration and Planning (E-RAP), plus access E-RAP through the mywcc portal at mywcc.waubonsee.edu prior to registering (highly recommended).
STEP 4 Register for classes in person, by mail or fax. You can register at the same time you submit the New Student Information Form.
STEP 5 Pay for your classes at the time of registration (full or partial payment).

## Returning/Continuing Students

Complete the following steps if you have been enrolled at Waubonsee during a previous semester.
STEP 1 Meet with a Counselor prior to registering (highly recommended).
STEP 2 Register for courses in person, by mail, by fax, or online at mywcc.waubonsee.edu. Full or partial payment is due at the time of registration.

| Questions? Call (630) 466-7900. |  |
| :---: | :---: |
| Admissions. | .......ext. 5756 |
| Assessmen | ....ext. 5700 |
| Counseling | .ext. 2361 |
| Financial Aid | ext. 5774 |
| Registra | ext. 2370 |

[^0]
## WAUBONSEE <br> what you can learn

## Educational Options

## Educational Options

Waubonsee Community College offers its students a variety of educational programs and services. Many students come to Waubonsee looking for education leading to a satisfying career. Others come for college credit they can transfer to a four-year college or university. Still others come to develop a specific job skill, to improve their ability to speak and write the English language, to continue the process of lifelong learning, or to obtain help in deciding their future.

This section summarizes the many opportunities available to the Waubonsee community, as well as the college's programs and services offered in accordance with its mission.

## Transfer Education

Students can come to Waubonsee Community College to earn credits that transfer to a four-year college or university. Many different programs are available to prepare them for work at the junior level after they transfer. Individually tailored programs lead to the Associate in Arts degree (AA), the Associate in Science degree (AS), the Associate in Engineering Science degree (AES), or the Associate in Fine Arts degree (AFA).

The courses taken at Waubonsee Community College are those normally taken during the first two years of the baccalaureate degree. Since requirements can vary from one university to another, each program must be planned with a counselor or advisor. Students can complete Waubonsee's degree requirements and be in a favorable position to transfer to the senior college or university of their choice. Most universities and senior colleges award junior standing to students who have earned a transfer degree. For specific degree and program information, see the "Transfer Degree Guidelines" section in this catalog.

## Career and Technical Education

Many students at Waubonsee are working to gain the necessary skills and knowledge to prepare for a job in a career area. Some students take only a few career courses to reinforce and improve skills they already possess. Others enroll in a two-year program leading to an Associate in Applied Science degree (AAS) or enter a shorter sequence leading to a Certificate of Achievement.

Trained and skilled individuals are needed to meet increasingly exacting job qualifications. Career education programs prepare students to step directly into this fast-moving age of technological change. For specific degree, program and certificate information, see the "Career and Technical Education" section in this catalog.

## Basic Skills Education

## Adult Basic Education

Adult Basic Education (ABE) gives adults who did not graduate from high school an opportunity to enhance their basic skills in the areas of vocabulary, reading, writing and mathematics. Morning and evening classes are offered at the Aurora Downtown Campus and other locations throughout the district. An assessment to determine skill levels is required before class placement. This course may eventually lead to enrollment in high school equivalency (HSE) preparation. Call the Adult Education office for information (see directory).

## Adult Education Computer Center (AECC)

The AECC offers adult education students an opportunity to enhance their studies using computer aided instruction in the areas of basic academic skills, HSE preparation, workforce preparation, English as a Second Language and literacy. The center is located at the Aurora Downtown Campus. Adult Education aides are available in the center during all open hours to assist students with an individual plan of instruction. The AECC allows students to start anytime during the semester, with registration after their first visit. There is no charge for this program. Call the Adult Education office for more information (see directory).

## Adult Education Special Programs

This comprehensive program offers opportunities for low-income adult education students to obtain self-sufficiency through education and training. These programs are designed to offer personalized assistance to the potential college student who plans to pursue a certificate or associate degree in a vocational area. Among the Special Programs are the Youth Services Program and the Transition Advising Services.

The Youth Services Program offers career exploration and job search/placement in the areas of health care, electrical maintenance and more to students between the ages of 16 and 24. Among the many benefits available to eligible students are free tuition and fees, books, limited assistance with child care payments and transportation, individual case management, and other support services. Students lacking a high school diploma are strongly encouraged to attend high school equivalency classes to work toward HSE attainment prior to enrolling in a career certificate program. One year follow-up is given to students once they've completed their course of study and obtained employment.

## Adult Literacy Project

The Adult Literacy Project trains and places volunteers to provide English language tutoring to adults who want to improve their reading and writing skills or learn English. Volunteer tutors instruct on an individual basis or assist classroom instructors in adult basic education (ABE) and English as a Second Language (ESL) classes. Training sessions are scheduled throughout the year to teach new volunteers the necessary skills to facilitate positive learning experiences. The mission of the Adult Literacy Project is to empower adults to be responsible citizens and parents through the process of improved literacy skills. Family literacy, conversation groups and writing groups are offered. The program is an accredited ProLiteracy Worldwide affiliate. For more information, call Adult Literacy (see directory).

## English as a Second Language

The English as a Second Language (ESL) program offers nonnative adults, 16 years of age and older, the opportunity to learn the English language while also learning about American culture. Students develop reading, writing, listening and speaking skills necessary for success in the workplace, community and further coursework. Grammar, writing and conversation classes are also available throughout the year. Morning and evening classes are offered at the Aurora Downtown Campus and other selected sites in the community. There is no charge for this program. For more information about testing and placement into classes, call the ESL office (see directory).

## High School Equivalency

The High School Equivalency (HSE) courses, offered in both English and Spanish, prepare adults who do not have a high school diploma for the HSE exams in the areas of writing skills, social studies, science, reading, mathematics, and the U.S. and state constitutions. An assessment determining appropriate content areas of study precedes class placement. Morning and evening classes are offered at the Aurora Downtown Campus and other locations throughout the district.

The High School Equivalency (HSE) Testing program at Waubonsee allows individuals to obtain their HSE certificate by completing their final certification exams through approved HSE testing vendors. HSE final exams are offered through both GED Testing Service and TASC (Test Assessing Secondary Completion). Exams are offered in both English and Spanish and require an appointment. Registrations and testing appointments for GED Testing Service are made through Pearson-VUE at www.GED.com or you may contact Pearson-VUE directly at (877) 392-6433. Registrations and testing appointments for TASC are made at https://illinois.tasctest.com or you may contact TASC directly at (888) 282-0589. Payment for the exams are made directly through GED and TASC. For more information, please visit www.GED.com or www.tasctest.com. All exams are administered through Waubonsee's Learning Assessment and Testing Services (see directory) who also administers the constitution test, one of the required parts of the HSE final certification process.

## Outreach and Retention

Free outreach and retention services are offered to help high school equivalency (HSE) and ESL graduates transition into college-level courses in pursuit of a degree or certificate. Assistance includes referrals to appropriate services (i.e. academic counseling and financial aid), coordination of appointments with different departments and assistance in exploring specific vocational careers. For more information or to register, contact Adult Education (see directory).

## Community Education

Community Education presents a wide variety of programs designed to enrich the lives of all members of the Waubonsee Community College district - young and old alike.

## Personal Enrichment Courses

Community Education offers noncredit courses in astronomy, art, cooking, languages, music, writing, gardening, personal finance and fitness. Many enrichment courses are also available online through ed2go at www.ed2go.com/waubonsee.

## Special Events

Each year, Community Education presents a diverse season of lectures, events and family programs. Many events - often featuring local experts - are offered free of charge. Past speakers have included Clay Jenkinson, Reed Timmer, Ryan Buell and the Hillstrand Brothers. More information on special events can be found at www.waubonseetickets.com or by calling Community Education.

## Xcelerate

Xcelerate enrichment camps for kids and teens are offered each summer by Community Education. Camps are held at the Sugar Grove, Plano and Aurora Downtown Campuses and feature such topics as science, technology, gaming, Lego robotics, fashion, cheerleading and performing arts.

## Trips and Tours

Trips and tours are offered to a variety of local and regional destinations including museums, theatres and city sites. Each trip is designed to be both fun and educational. Extended tours are also offered to a variety of destinations around the world.

## Lifelong Learning Institute

Community Education advises and hosts the Lifelong Learning Institute (LLI) - an independent organization devoted to learning for persons age $50+$. Members of the LLI share their cumulative life experiences in an informal classroom setting while expanding their knowledge of a variety of topics. Each course is designed for maximum participation under the leadership of a member who acts as a facilitator. For more information call the Lifelong Learning Institute at (630) 466-2593.

## Total Fitness Center

Membership in the Total Fitness Center in Erickson Hall is offered to both students and members of the community. Members have access to the latest cardio equipment, free weights and Cybex strength training systems. Knowledgeable staff are always available to help members achieve their fitness goals, as well as advise on health and exercise related matters.

The Total Fitness Center also offers a variety of group exercise classes and programs including Winning by Losing, Group Fitness, Golf Conditioning and Zumba. Call the Total Fitness Center (see directory) for more information on membership and programs.

## Online Learning

Online Learning at Waubonsee Community College provides a variety of courses to students seeking a degree, individuals in the workplace and community members with special interests. Waubonsee offers students learning formats that save them travel time and allow for flexible scheduling, including online courses and hybrid courses.

## Online Learning Degrees and Certificates

Students are able to complete select degrees or certificates $100 \%$ online by taking only online courses. Currently, the Associate in Arts, Associate in Science, Associate in General Studies degrees, along with several Associate in Applied Science degrees and Certificates of Achievement can be completed online. For more information about degrees and certificates, contact the Counseling Department.

## Online Courses

Waubonsee offers nearly 200 online courses providing students the flexibility of scheduling courses around their personal and work schedules. Students can access their online courses anywhere they have an Internet connection. They are able to interact with their instructor and fellow classmates using email, discussion boards and virtual chat rooms. Each course has a start and end date and schedule for completing course work. Some courses may require proctored exams. Students can take proctored exams at Waubonsee's Learning Assessment and Testing Services. Check the current credit schedule for a list of available online courses.

## Hybrid Courses

Waubonsee offers select courses in a hybrid format, where both face-to-face and online components are required. Each course has a start and end date and a schedule for completing course work. Each class section meets face-to-face at a campus location on specific dates and times as noted in the credit schedule. Other course work is accessed and completed online. Check the current credit schedule for a list of available hybrid courses

## Internship/Externship Program

Internships enable students to acquire professional work experience, establish references and begin a career. Students with a faculty advisor's consent can also earn up to three semester hours per term. Students are encouraged to research internship opportunities and the Career Development Center is available to assist. Please contact careerdevelopment@waubonsee.edu or the Dean for the appropriate instructional division for more information.

## Programs for High School Students

Waubonsee offers a variety of credit and noncredit courses for area high school students, as well as special programs, competitions and SAT/ACT testing services.

## SAT/ACT Preparation Classes and Testing

Community Education offers SAT/ACT preparation classes each fall and spring semester. Dates and locations can be obtained by searching the noncredit course schedule at www.waubonsee.edu/ schedules or by calling the Community Education division (see directory). Official SAT/ACT testing is also offered on national test dates through Waubonsee's Learning Assessment and Testing Services.

## VALEES

## Credit for High School Coursework

Through an articulation agreement between the Valley Education for Employment System (VALEES) and Waubonsee Community College, credit may be awarded in college degree or certificate programs to students who have successfully completed articulated secondary courses.

Students should first discuss credit transfer with their high school teachers and counselor, then complete the VALEES College Credit Articulation Form. The form is available online at www.valees. org, from high school guidance counselors, from Waubonsee's counselors or at the VALEES office (Building A, Room 161 on the Sugar Grove Campus). Next, students should request that an official high school transcript be forwarded directly to the VALEES office at Waubonsee. Both forms need to be received in the VALEES office for consideration of credit for high school coursework.

Specific requirements under this agreement include:

- Application for articulated credit must be made within two years from the date of high school graduation or last term of high school attendance.
- Students must record the articulated credit and enroll in a college class within two years from the date of high school graduation or last term of high school attendance.
- A grade of B ( 3.0 on a 4.0 scale) must be earned for each semester of high school coursework to be considered for college credit.
- Credit awarded under this agreement, is recorded on a student's college academic record (transcript) as credit by proficiency and becomes part of the total number of credits required for program completion. A recording fee of $\$ 10$ per credit hour applies to credit articulated.
- For a complete listing of articulated classes and an application, visit the VALEES website at www.valees.org.
- Credit will be recorded after the refund period of the student's first semester of enrollment.


# VALEES Member Schools 

Batavia High School — District \#101<br>Earlville High School — District \#9<br>East Aurora High School — District \#131<br>Fox Valley Career Center<br>Geneva High School — District \#304<br>Hinckley/Big Rock High School — District \#429<br>Indian Creek High School — District \#425<br>Indian Valley Vocational Center<br>Kaneland High School — District \#302<br>Leland High School — District \#1<br>Newark High School — District \#18<br>Oswego High School — District \#308<br>Oswego East High School — District \#308<br>Paw Paw High School — District \#271<br>Plano Area Special Education Cooperative<br>Plano High School — District \#88<br>Sandwich High School — District \#430<br>Serena High School — District \#2<br>Somonauk High School — District \#432<br>West Aurora High School — District \#129<br>Yorkville High School — District \#115

## Dual Credit

Dual credit courses provide both high school and college credit. Waubonsee offers dual credit courses in cooperation with many area high schools. These courses are taught in the high school by qualified high school teachers, but have the same outlines, objectives and textbooks as a college level course. Students should check with their high school counselor to identify dual credit courses available at their high school. Most dual credit courses offered in high schools do not carry a tuition charge, though certain fees may be collected.

Students who are able to demonstrate readiness for college-level work during the term they are registered for and have obtained permission from their high school, may enroll in a credit course on one of the Waubonsee Community College campuses for which they have met the prerequisites. At the discretion of the high school, students may receive both college and high school credit (dual credit) for the course. Students who take a course in this manner must pay all tuition and fees and register using the High School Registration/Authorization Form, which requires the signature of a high school principal or counselor. (See page 229).

Dual credit courses taken through Waubonsee are recorded on the student's transcript and evaluated in determining academic standing and future eligibility for financial aid.

For all dual credit courses, college credit earned may be applied toward a degree or certificate at Waubonsee or may be transferred to another college. For more information about dual credit, contact the High School Partnership Center (see directory).

## Summer Opportunity for Advancement and Recovery (SOAR)

For students who need to recover high school course credits or for those who want to work ahead, the Waubonsee Community College High School SOAR Program provides quality instruction taught by area high school teachers. High school students throughout Waubonsee's district may attend classes each summer (June and July) at the Aurora Downtown or Sugar Grove Campuses. A limited schedule of classes may be offered at the Auora Fox Valley and/or Plano Campuses. Individual high schools determine the amount of credit students receive for courses. Registration begins annually in March. For more information, contact the High School Partnership Center (see directory).

## TRIO/Upward Bound

The Waubonsee Upward Bound Program is a federally funded college preparatory program that serves students at East Aurora High School. The program provides students with the motivation and support necessary to go to college. Year-round services include academic courses, tutoring, course advisement, national college visits and cultural enrichment activities, financial aid and college readiness workshops, and a six-week academic intensive summer program. All services are provided at no cost. For more information, contact the Upward Bound Manager (see directory) or visit www.waubonsee.edu/upwardbound.

## ROTC Transfer Option

Students who intend to transfer to a four-year school that offers a Reserve Officers' Training Corps (ROTC) program may accomplish the basic coursework in their first two years at Waubonsee. The Military Science (MSC) curriculum is detailed in the "Course Descriptions" section. For more information, contact the Dean for Social Sciences, Education and World Languages or Counseling Department (see directory).

## Study Abroad

Waubonsee is a member of the Illinois Consortium for International Studies and Programs (ICISP). Study abroad programs can take Waubonsee students to England, Ireland, Austria, Spain, Costa Rica, France and other countries for programs offering a comprehensive mix of study and cultural/ social activities. For example, students might spend a summer session in the Spanish immersion program in Costa Rica or an entire fall or spring semester on campus in Canterbury, England, or Salzburg, Austria. For more information about the program requirements, visit the Career Development Center's webpage at www.waubonsee.edu/careerdevelopment and click on 'Study Abroad'. Interested students should inquire and apply early (at least six months in advance of program offerings).

## Weekend Schedule

Waubonsee Community College offers students an opportunity to take courses on the weekend. For students with commitments during the week, Waubonsee schedules selected classes on Saturdays at the Sugar Grove, Aurora Downtown, Aurora Fox Valley, and Plano Campuses. Please check the semester credit course schedule for more information.

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## Workforce Development

The Workforce Development division provides professional development services and training solutions for area businesses, organizations and individuals.

## Professional Development

Waubonsee offers an array of short, noncredit courses for job seekers, career changers and those seeking to update their job skills. This department develops and delivers a regular schedule of courses, seminars and workshops to meet the training, certification, recertification and continuing education needs of individuals in many professions. Courses are offered in a variety of topics, including computers, health care, supervisory skills, manufacturing, warehousing and safety.

Courses are focused to address specific needs, giving participants skills they can put to immediate use in the workplace. Classes are conveniently scheduled to begin throughout the year and to meet at various dates, times, and locations, and many courses are offered online. For individuals looking to change careers, Workforce Development offers on-line and face-to-face learning options to fit the needs of adults.

The department's course offerings are published each semester in the college's noncredit schedule. Call the Workforce Development division to request a copy (see directory). The schedule can also be found online at www.waubonsee.edu/schedules. Waubonsee's Workforce Development division is approved by the Illinois State Board of Education (ISBE) as a provider of Continuing Education Units (CEUs) and Continuing Professional Development Units (CPDUs) for teacher recertification requirements.

## Business Solutions and Training

When business leaders seek expert training for their employees, Waubonsee's business training department works to deliver affordable training solutions designed to meet specific needs. Through partnerships with business, industry and other local organizations, our customized training staff arranges leadingedge, targeted training programs. The team has the expertise and experience to provide comprehensive training solutions on-site or at one of Waubonsee's four campus locations. With more than 100 content experts available to work with businesses, the department brings expertise to ensure both practical knowledge and real-world application. Topics include, but are not limited to, business and management, communication, manufacturing and industrial skills, quality process improvement, safety, health and computer software training.

## Driver Safety Program

Driver Safety offers the National Safety Council's widely acclaimed four-hour and eight-hour Defensive Driving courses, as well as the very popular "Alive at 25 " program, at locations throughout Kane, Kendall and DeKalb Counties. These courses are approved by the 16th and 23rd Judicial Circuits for use in their court supervision program for minor traffic violations. The increasing number of drivers and vehicles on the road creates a continuing need for defensive driving training across all age groups. Our skilled instructors focus on practical strategies to prevent traffic citations and collision-related injuries and fatalities. The "Alive at 25 " program is aimed at drivers who are most at risk since traffic crashes are the number one cause of death for drivers ages 15 to 24 . "Alive at 25 " will help young drivers understand the consequences of the driving choices they make and why they often underestimate risks.

## (C) See directory inside back cover.

# College Learning Outcomes 

## College Learning Outcomes

Higher education generates learning that prepares students to deal with a complex, diverse and changing world while respecting individuals, cultural differences, and alternative views. Waubonsee Community College believes students must gain knowledge, skills and abilities from the college experience beyond the specific content each class provides. These core competencies, called College Learning Outcomes, are vital to success in work and in life. Consistent with the institutional mission and vision, Waubonsee is committed to offering experiences, both inside and outside of the classroom, that allow students to acquire, develop, and demonstrate growth in these competencies. They are:

- CRITICAL THINKING: Students will be able to acquire, analyze, synthesize and evaluate information for efficacy in order to develop conclusions and implement solutions while actively engaging in learning and questioning beyond the content of any one course, making connections between courses, disciplines, life experiences and accumulated knowledge.
- COMMUNICATION: Students will be able to read, comprehend and interpret multimedia (oral, written and visual texts) situated in various contexts; deliver clear, well-organized speeches, presentations, visuals or ideas appropriate to various contexts and audiences; and write clear, concise communications appropriate to various contexts and audiences.
- QUANTITATIVE LITERACY: Students will be able to acquire, analyze, use and represent mathematical and scientific data and information symbolically, visually, numerically and verbally to recognize and understand problems and trends, to conduct experiments and observations, to develop appropriate solutions and conclusions, and to understand the interrelatedness of quantitative reasoning and other disciplines.


## WAUBONSEE <br> what you can learn

# Transfer Degree Program 

# Transferring Credit from Waubonsee 

## TRANSFER ADVISING AND PLANNING

To make the most of your time at Waubonsee, meet with a counselor or advisor to discuss all the options available to you. Effective planning can help you transfer your credit to the fouryear college or university of your choice. The Counseling, Advising \& Transfer Center has transfer/articulation guides that explain how courses transfer into various programs at each university. Also, see www.waubonsee.edu/transferring for more information including steps to planning your transfer, transfer agreements and $2+2$ transfer guides, and transferology and iTransfer online databases.

## Purpose of the

Transfer Degree Curriculum
The Associate in Arts (AA), Associate in Science (AS), Associate in Engineering Science (AES), and Associate in Fine Arts (AFA) degrees are intended for students planning to transfer to a fouryear college or university for a baccalaureate degree.
These associate degrees are designed to transfer to a fouryear institution. However, since requirements can vary from one university to another, it is recommended that all students create an educational plan with a Waubonsee counselor or advisor. Courses taken at other colleges and/or universities are evaluated upon request. See page 228 (Admission of Transfer Students) and page 241 (Transferring Credits to Waubonsee) for more information.

The courses students take at Waubonsee Community College are those normally taken during the first two years of the baccalaureate degree. Students can complete Waubonsee's degree requirements and be in a favorable position to transfer to the four-year college or university of their choice. Most universities and senior colleges award junior standing to students with an Associate in Arts, Science, Engineering Science or Fine Arts degree. See waubonsee.edu/transferring for more information.

## Transfer Degree Guidelines

The transfer degree guidelines listed in the next section of this catalog illustrate courses a student might take if interested in a particular area of study. The guidelines are based on the format used to show degree requirements, and they assist the student in completing the general education requirements of a four-year degree, as well as taking introductory courses in a major field of study. While the guidelines are helpful, students should work with a counselor to develop individual plans.

## Articulation Compact

Waubonsee Community College participates in agreements with most state universities in Illinois that state: "A transfer student in good standing who has completed an associate degree based on baccalaureate-oriented sequences from an Illinois community college shall be considered: A) to have attained 'junior' standing; and $B$ ) to have met lower division general education requirements
of senior institutions." The Compact Agreement applies to general education requirements, and if, while at Waubonsee, students have not taken lower division courses included in their major field requirements, they will be required to do so by the senior institution. Also see the section on joint admission on page 230.

## Illinois Articulation Initiative

Waubonsee Community College participates in the Illinois Articulation Initiative (IAI), a major, statewide, cooperative agreement among participating Illinois colleges and universities to facilitate successful transfer of course credits from one participating institution to another, effective beginning summer 1998. The IAI defines a general education core curriculum, and Waubonsee's transfer curriculum for the Associate in Arts (AA) and Associate in Science (AS) degrees conforms to it. Students who follow the prescribed curriculum can be assured that the credits satisfy general education requirements at participating Illinois colleges and universities. See the "Course Descriptions" section of this catalog for a list of Waubonsee's IAI general education and major courses approved to date.

## Transfer Guarantee

The Transfer Guarantee formally assures students that certain courses transfer to in-state colleges and universities. The college backs up the guarantee with a tuition refund if the course does not transfer. Students should be aware that because baccalaureate degree completion requirements change over time, transfer agreements may expire and/or students may be expected to complete additional coursework by the transfer institution. Students should contact an advisor/counselor for determining the transferability of courses to their chosen four-year institution. To make a claim, students must notify Waubonsee's Vice President of Educational Affairs, in writing, within 60 days of learning that course credit has been declined or refused by the receiving university. The letter should state the reasons, if any, given for the action and the name, position, address and telephone number of the person who processed the application for credit transfer or acceptance. Copies of any correspondence, transfer evaluation or other documentation provided to or received from the transfer institution regarding the student's transfer application must accompany the notice.

Waubonsee Community College agrees to reimburse students the tuition for any course listed on the application if the receiving public Illinois university declines to transfer or accept the course credit for some purpose under these terms:

1. Students take and successfully complete the course(s) during the term stated;
2. Students earn at least a grade of C for the course(s);
3. Students are accepted by and actually transfer to the receiving university within three years from the date this guarantee is issued;
4. Students promptly apply to have the course credit transferred to and accepted by the receiving university upon transfer;
5. Students make a claim under this guarantee as provided above
within four years from the date this guarantee is issued;
6. Students cooperate fully with Waubonsee Community College in its efforts to have the credit transferred or accepted by the receiving university, including giving any necessary consents or releases regarding student records; and,
7. After the claim is received, Waubonsee Community College has 120 days to attempt to have the receiving university reverse its earlier decision to deny course credit.

The Illinois Articulation Initiative (IAI) became effective during summer 1998. Since individual colleges and universities determine which course credits earned prior to summer 1998 will transfer, students should contact the Counseling, Advising and Transfer Center at Waubonsee to discuss their particular circumstances (see directory).

Waubonsee does not guarantee that the letter grade earned in the WCC course will be considered by the receiving university in determining the student's grade point average, honors, or for other purposes, but only that the receiving university gives course credit for some purpose. The guarantee does not provide for the refund of tuition for any other course(s), any fees or any incidental or consequential expenses or claims whatsoever, but only for refund of tuition for the guaranteed course(s) for which course credit is not given by the receiving university.

Students' rights under the guarantee are personal and may not be assigned or transferred, voluntarily or involuntarily. Further, no refund is required or is made if the scholarship, financial aid program, loan or other source used to pay the tuition prohibits payment or reimbursement of tuition directly to the students.

For further information concerning this program, contact the Vice President of Educational Affairs (see directory).

## On-Campus/Online Bachelor's Degree Completion

Waubonsee Community College is working to make it even easier for our associate degree graduates to earn their bachelor's degree. Through unique partnerships with several colleges and universities, WCC graduates can complete their four-year degrees by taking classes at WCC campuses, at other sites close to home, or even online. See waubonsee.edu/transferring for more information.

## High School Requirements

As of the 1993 fall semester, students applying for admission to a baccalaureate transfer program (Associate in Arts, Associate in Science, Associate in Engineering Science or Associate in Fine Arts) must meet the minimum high school course pattern requirements as outlined in Illinois Public Act 86-0954 (see table). A student who does not meet these requirements at the time of application is provisionally admitted to Waubonsee as a pre-baccalaureate transfer student. When course deficiencies have been completed, the student is reclassified as a baccalaureate transfer student.

## HIGH SCHOOL REQUIREMENTS

| Subject | Years | Courses |
| :--- | :---: | :--- |
| English | 4 | Written and Oral <br> Communication, <br> Literature |
| Mathematics | 3 | Algebra, Geometry, <br> Algebra Trigonometry |
| Social Studies | 3 | History, Government <br> Science |
| Electives | 3 | Laboratory Science <br> Foreign Language, Art, <br> Music or Vocational |

Students with academic deficiencies are considered by Waubonsee Community College to have satisfied these deficiencies upon successful completion of a minimum of 24 college-level credits. Included in these 24 units must be ENG 101 - FirstYear Composition I, COM 100 - Fundamentals of Speech Communication, a social science course, a laboratory course, and a mathematics course chosen from courses meeting general education requirements in their respective categories.

## Transfer Degree Requirements

## Associate in Arts (AA)

The Associate in Arts degree is designed for transfer to four-year institutions and intended for students majoring in Art/Graphic Arts, Business, Communications, Criminal Justice, Economics, English, Foreign Languages, History, Liberal Arts, Mass Communication, Music, Philosophy, Political Science, Psychology, Sociology, Social Work, and Theatre. Consult with a counselor for specific guidelines on choosing courses.

## I. College Requirements

A. Semester Hours

A total of 60 semester hours or more completed as specified in the following sections.

## B. Grade-Points

A minimum cumulative grade point average of 2.0
( $C$ average) in all coursework taken, regular student status and in good standing.

## C. Academic Residency

Meet the college's academic residency requirement: a minimum of 15 semester hours in courses must have been achieved at Waubonsee, excluding credit by proficiency.

## II. General Education Requirements

Waubonsee's requirements conform to IAI General Education Core Curriculum guidelines. Courses listed in section II match Waubonsee's IAI website as of March 2017.
(Courses are 3 sem hrs unless indicated.)
Associate in Arts (AA)
37 sem hrs
A. Communications................................................... 9 sem hrs
Communications: COM 100
English: ENG $101^{*}$ and 102*
B. Social and Behavioral Sciences $\qquad$ 9 sem hrs
Select courses from at least two of the following
disciplines. Courses in bold identify Non-Western and
Diversity options: $\mathbf{N}$ indicates non-Western; $\mathbf{D}$ indicates diversity.
Anthropology: ANT 101 (N), 102, 110
Economics: ECN 100, 201, 202
Geography: GEO 120 (N), 220 (N), 235 (N)
History**: HIS 101 (N), $\mathbf{1 0 2}$ (N), 121, 122, 205 (N), 215 (N), 220 (N), 225 (N), 235 (N)
Political Science: PSC 100, 220, 240, 260
Psychology: PSY 100, 205, 215, 220, 226, 235
Sociology: SOC 100, 120 (D), 130, 210, 230 (D)

## Degree Requirements Footnotes

* IAI General Education requires a C or better in these courses.
** No more than two history courses can be used to fulfill general education requirements.
\%* Interdisciplinary humanities courses that encompass both humanities and fine arts may be used for either humanities or fine arts credit.
C. Physical and Life Sciences 7 sem hrs
Select at least one course from Physical Sciences and one course from Life Sciences. Select at least one lab course.
(L indicates lab course.)


## Physical Sciences

Astronomy: AST 100, 105 (4-L)
Chemistry: CHM 100, 101 (1-L), 102, 103 (1-L), 121 (4-L)
Earth Science: ESC 100, 101 (1-L), 110, 120 (4-L), 130
Geography: GEO 121 (4-L)
Geology: GLG 100, 101 (1-L), 102 (4-L), 103,120
Physics: PHY 103, 104 (1-L), 111 (4-L), 221 (5-L)

## Life Sciences

Biology: BIO 100, 101 (1-L), 102, 103 (1-L), 110, 111 (1-L), 120 (4-L)
D. Mathematics 3 sem hrs Mathematics: MTH 101, 102, 107, 131 (4), 132 (4), 202, 210, 211 (4), 233 (4)
E. Humanities and Fine Arts. $\qquad$ 9 sem hrs
Select at least one course from Humanities and one course from Fine Arts. Courses in bold identify Non-Western and Diversity options: N indicates non-Western; D indicates diversity.

## Humanities

English: ENG 211, 212, 215, 220 (D), 221, 222, 225, 226, 229, 230, 235, 240, 245, 255 (D)
Film Studies: FLM 270***
French: FRE 202
German: GER 202
History**: HIS 111, 112, 125
Humanities***: HUM 101, 102 (N), 201
Philosophy: PHL 100, 101, 105, 110, 120 (N), 201, 202
Religious Studies: RLG 120 (N), 220, 230, 240
Spanish: SPN 202, 205, 215

## Fine Arts

Art: ART 100, 101, 102, 103 (N), 104, 105 (D), 106
Film Studies: FLM 250, 260, 270***
Humanities***: HUM 101, 102 (N), 201
Music: MUS 100, 101 (N), 102
Theatre: THE 100, 130 (D)

## III. Additional College Requirements

Note: Students should consult with a counselor to determine foreign language requirements at the four-year school to which they intend to transfer. Bachelor of Arts degrees typically require a foreign language for graduation.
A. Social Awareness/Personal Growth $\qquad$ College Success Topics: COL 100 (2), 101 (1), 102 (1),110, 131 (1)
Disability Studies: DIS 101, 110
Foreign Language/Sign Language:
CHN 101, 102; FRE 101, 102, 201, 202;
GER 101, 102, 201, 202; JPN 101, 102;
SGN 101, 102; SPN 101, 102, 103, 110, 111, 201, 202, 205, 211
Health Education: HED 100
Peace Studies: IDS 210, 220
Physical Education activity courses: PED 100 -149 (0.5-1)
Sustainability: SUS 101
(Students who served in the Armed Services may be granted Physical Education credit for the Social Awareness/ Personal Growth requirement.)
B. Non-Western and Diversity

One course satisfying degree requirements must have a non-Western (N) or diversity (D) emphasis. These courses are highlighted in bold in the General Education Requirements Social and Behavioral Sciences (item II.B.) and Humanities and Fine Arts (item II.E.). This is not an additional credit hour requirement.
IV. Area of Concentration/Elective Requirements Associate in Arts............................................. 20-21 sem hrs Students should consult with a counselor early in their
program of studies to determine appropriate course
choices, including any foreign language requirement,
and transferability of courses based on their major and
the four-year school to which they intend to transfer.

Note: A maximum of four semester hours each of Independent Study (IND), College Success Topics (COL) or Physical Education (PED) may be applied toward a degree. The maximum semester hours for Physical Education (PED) credit may be waived for physical education or education majors.

## Transfer Degree Requirements

## Associate in Science (AS)

The Associate in Science degree is designed for transfer to fouryear institutions and intended for students majoring in Biology, Chemistry, Computer and Information Sciences, Education, Engineering, Geography, Geosciences, Health-related Fields, Mathematics, Physical Education, Physics, Pre-Medicine/ Dentistry, and Science. Consult with a counselor for specific guidelines on choosing courses.

## I. College Requirements

A. Semester Hours

A total of 60 semester hours or more completed as specified in the following sections.

## B. Grade-Points

A minimum cumulative grade point average of 2.0
( $C$ average) in all coursework taken, regular student status and in good standing.

## C. Academic Residency

Meet the college's academic residency requirement: a minimum of 15 semester hours in courses must have been achieved at Waubonsee, excluding credit by proficiency.

## II. General Education Requirements

Waubonsee's requirements conform to IAI General Education Core Curriculum guidelines. Courses listed in section II match Waubonsee's IAI website as of March 2017.
(Courses are 3 sem hrs unless indicated.)
Associate in Science (AS) $\qquad$ 31 sem hrs
A. Communications. 9 sem hrs
Communications: COM 100
English: ENG 101* and 102*
B. Social and Behavioral Sciences 6 sem hrs
Select courses from two of the following disciplines.
Courses in bold identify Non-Western and Diversity options: $\mathbf{N}$ indicates non-Western; $\mathbf{D}$ indicates diversity.
Anthropology: ANT 101 (N), 102, 110
Economics: ECN 100, 201, 202
Geography: GEO 120 (N), 220 (N), 235 (N)
History**: HIS 101 (N), 102 (N), 121, 122, 205 (N),
215 (N), 220 (N), 225 (N), 235 (N)
Political Science: PSC 100, 220, 240, 260
Psychology: PSY 100, 205, 215, 220, 226, 235
Sociology: SOC 100, 120 (D), 130, 210, 230 (D)
C. Physical and Life Sciences

7 sem hrs
Select at least one course from Physical Sciences and one course from Life Sciences. Select at least one lab course.
(L indicates lab course.)

## Physical Sciences

Astronomy: AST 100, 105 (4-L)
Chemistry: CHM 100, 101 (1-L), 102, 103 (1-L), 121 (4-L)
Earth Science: ESC 100, 101 (1-L), 110, 120 (4-L), 130
Geography: GEO 121 (4-L)
Geology: GLG 100, 101 (1-L), 102 (4-L), 103, 120
Physics: PHY 103, 104 (1-L), 111 (4-L), 221 (5-L)

## Life Sciences

Biology: BIO 100, 101 (1-L), 102, 103 (1-L), 110, 111 (1-L), 120 (4-L)
D. Mathematics 3 sem hrs
Select one of the following courses.
Mathematics: MTH 101, 102, 107, 131 (4), 132 (4), 202, 210, 211 (4), 233 (4)
E. Humanities and Fine Arts. 6 sem hrs
Select at least one course from Humanities and one course from Fine Arts. Courses in bold identify Non-Western and Diversity options: N indicates non-Western; D indicates diversity.

## Humanities

English: ENG 211, 212, 215, 220 (D), 221, 222, 225, 226, 229, 230, 235, 240, 245, 255 (D)
Film Studies: FLM 270***
French: FRE 202
German: GER 202
History**: HIS 111, 112, 125
Humanities***: HUM 101, 102 (N), 201
Philosophy: PHL 100, 101, 105, 110, 120 (N), 201, 202
Religious Studies: RLG 120 (N), 220, 230, 240
Spanish: SPN 202, 205, 215

## Fine Arts

Art: ART 100, 101, 102, 103 (N), 104, 105 (D), 106
Film Studies: FLM 250, 260, 270***
Humanities***: HUM 101, 102 (N), 201
Music: MUS 100, 101 (N), 102
Theatre: THE 100, 130 (D)

## III. Additional College Requirements

When selecting courses for the Additional College Requirements, consult with a counselor, as four-year schools have specific requirements.

## Associate in Science (AS).

$\qquad$ 6-8 sem hrs
Select two courses: one additional math course and one additional physical or life science course.

```
A. Physical and Life Sciences.
``` \(\qquad\)
``` .3-4 sem hrs
Consult with a counselor to determine the appropriate choice based on your major and the four-year institution to which you intend to transfer. (L indicates a lab course.) Astronomy: AST 100, 105 (4-L)
Biology: BIO 100, 101 (1-L), 102, 103 (1-L), 110, 111 (1-L), 120 (4-L), 122 (4-L), 200, 250 (4-L), 270 (4-L), 272 (4-L) Chemistry: CHM 100, 101 (1-L), 102, 103 (1-L), 121 (4-L), 122 (4-L), 202, 231 (4-L), 232 (4-L)
Earth Science: ESC 100, 101 (1-L), 110, 120 (4-L), 125, 130 Geography: GEO 121 (4-L)
Geology: GLG 100, 101 (1-L), 102 (4-L), 103, 120
Physics: PHY 103, 104 (1-L), 111 (4-L), 112 (4-L), 221 (5-L),
222 (5-L),223 (4-L)
```

B. Mathematics. $\qquad$ 3-4 sem hrs
Consult with a counselor to determine the appropriate choice based on your major and the four-year institution to which you intend to transfer.
Mathematics: MTH 101, 102, 107, 109, 129, 130,
131 (4), 132 (4), 201, 202, 210, 211 (4), 233 (4), 236 (4), 240
C. Non-Western and Diversity

One course satisfying degree requirements must have a non-Western (N) or diversity (D) emphasis. These courses are highlighted in bold in the General Education Requirements Social and Behavioral Sciences (item II.B.) and Humanities and Fine Arts (item II.E.). This is not an additional credit hour requirement.
IV. Area of Concentration/Elective Requirements

Associate in Science.............................21-23 sem hrs
Students should consult with a counselor early in their program of studies to determine appropriate course choices, and transferability of courses based on their major and the four-year school to which they intend to transfer. Students may be required to enroll in two additional courses (one Humanities or Fine Arts course and one Social and Behavioral Science course) at their transfer institution.

Note: A maximum of four semester hours each of Independent Study (IND), College Success Topics (COL) or Physical Education (PED) may be applied toward a degree. The maximum semester hours for Physical Education (PED) credit may be waived for physical education or education majors.

## MATH PATH

See a counselor or advisor to determine which Math Path is right for you. The sequence of math courses you take depends on your program of study. You need a C grade or better to advance to the next level.


## Liberal Arts, Social Sciences and Fine Arts Majors



These charts can help you determine the sequence of math courses you will take as well as the prerequisites required; however, you should see a counselor or advisor for assistance. Where you start in the sequence will be based on your placement test results or other math readiness indicators. See the Placement Interpretation Guide on Waubonsee's website for more information.

Note: The courses in the gray boxes are Developmental Classes and do not apply towards the AA or AS Degree or any of the Career And Technical Programs.

## Degree Requirements <br> Associate in Engineering Science (AES) <br> (AES1) major code

The following sections list program requirements to achieve an Associate in Engineering Science degree at Waubonsee. This degree is designed to provide students a smooth transition to a four-year baccalaureate engineering degree program. Students who complete the AES degree can transfer to an engineering program and complete a Bachelor of Science degree in an additional two years, depending upon the requirements of the four-year institution.

## I. College Requirements

## A. Semester Hours

A total of 60 semester hours or more completed as speci-
fied in the following sections.

## B. Grade-Points

A minimum cumulative grade point average of 2.0 (C average) in all coursework taken, regular student status and in good standing.

## C. Academic Residency

Meet the college's academic residency requirement: a minimum of 15 semester hours in courses must have been achieved at Waubonsee, excluding credit by proficiency.

## Degree Requirements Footnotes

* IAI General Education requires a C or better in these courses.
** ECN201 is required in Industrial Engineering and recommended for other engineering specialties.
\%** No more than two history courses can be used to fulfill general education requirements.


## II. General Education Requirements

Since completion of the Associate in Engineering Science (AES) degree does not fulfill the requirements of the IAI General Education Core Curriculum, students must complete the general education requirements of the institution to which they transfer. Courses listed in section II are included on Waubonsee's IAI website as of March 2014. (Courses are 3 sem hrs unless indicated.)

## Associate in Engineering Science

(AES)
31 sem hrs

## A. Communications

$\qquad$ English: ENG 101* and 102 *

B. Social and Behavioral Sciences and
Humanities and Fine Arts

AES
$\qquad$
9 sem hrs

Students are encouraged to complete a two-semester sequence in either the Social and Behavioral Sciences or the Humanities and Fine Arts categories. Courses in bold identify Non-Western and Diversity options: $\mathbf{N}$ indicates non-Western; D indicates diversity.

## Social and Behavioral Sciences

Anthropology: ANT 101 (N), 102, 110
Economics: ECN 100, 201**, 202
Geography: GEO 120 (N), 220 (N), 235 (N)
History***: HIS 101 (N), 102 (N), 121, 122, 205 (N),
215 (N), 220 (N) (under IAI review), 225 (N), 235 (N)
Political Science: PSC 100, 220, 240, 260
Psychology: PSY 100, 205, 215, 220, 226, 235
Sociology: SOC 100, 120 (D), 130, 210, 230 (D)

## Humanities and Fine Arts

Art: ART 100, 101, 102, 103 (N), 104, 105 (D), 106
English: ENG 211, 212, 215, 220 (D), 221, 222, 225, 226, 229, 230, 235, 240, 245, 255 (D)
Film Studies: FLM 250, 260, 270
French: FRE 202
German: GER 202
History***: HIS 111, 112, 125
Humanities: HUM 101, 102 (N), 201
Music: MUS 100, 101 (N), 102
Philosophy: PHL 100, 101, 105, 110, 120 (N), 201, 202
Religious Studies: RLG 120 (N), 220, 230, 240
Spanish: SPN 202, 205, 215
Theatre: THE 100, 130 (D)
C. Physical and Life Sciences

AES.................................................................... 4 sem hrs
Chemistry: CHM 121 (4)
D. Mathematics

AES.
12 sem hrs
Math: MTH 131 (4), 132 (4), 233 (4)

## III. Additional College Requirements

## A. Non-Western and Diversity

One course satisfying degree requirements must have a non-Western or diversity emphasis. These courses are highlighted in bold in General Education Requirements Social and Behavioral Sciences and Humanities and Fine Arts (item II. B.). This is not an additional credit hour requirement.

## IV. Area of Concentration/Elective Requirements AES 29 sem hrs

## A. Essential Prerequisite Courses

AES.
16 sem hrs
Computer Information Systems: CIS 115
Mathematics: MTH 240
Physics: PHY 221 (5), 222 (5)
B. Engineering Specialty Courses AES .9-13 sem hrs
Students must select specialty courses based on their engineering major. Students should consult with a counselor to determine the appropriate choice based on their major and the four-year institution to which they intend to transfer. Students may wish to complete courses above the requirements of the AES degree upon advice of a counselor. Chemical Engineering: CHM122 (4), 231 (4), 232 (4) Civil Engineering: EGR101, 220, 230
Computer Engineering: CIS130 and 230, or CIS150 and 250
Electrical Engineering: CIS130 and 230, or CIS150 and 250
Industrial Engineering: EGR101, 220, 230
Mechanical Engineering: EGR101, 220, 230

## C. Elective Courses

AES 0-4 sem hrs
Students should select transfer courses based on their specific engineering major or take additional hours toward completion of the IAI general education core. Students should consult with a counselor early in their program of studies to determine the appropriate choices based on their major and the four-year institution to which they intend to transfer.

## Degree Requirements

## Associate in Fine Arts (AFA)

Art
(AFA1) major code

The following sections list program requirements to achieve an Associate in Fine Arts (AFA) transfer degree with an emphasis in art at Waubonsee. This degree is designed to provide students a smooth transition to a four-year baccalaureate art program. Transfer institutions may require art majors to submit a portfolio for review.

## I. College Requirements

## A. Semester Hours

A total of 61 semester hours as specified in the following sections.
B. Grade-Points

A minimum cumulative grade point average of 2.0
(C average) in all coursework taken, regular student status and in good standing.

## C. Academic Residency

Meet the college's academic residency requirement: a minimum of 15 semester hours in courses must have been achieved at Waubonsee, excluding credit by proficiency.

## II. General Education Requirements

Since completion of the Associate in Fine Arts (AFA) degree does not fulfill the requirements of the Illinois General Education Core Curriculum, students must complete the general education requirements of the institution to which they transfer. Courses listed in section II are included on Waubonsee's IAI website as of March 2014. (Courses are 3 sem hrs unless indicated.)
Associate in Fine Arts (AFA) ............................... 31 sem hrs
A. Communications

AFA..................................................................... 9 sem hrs
Communications: COM 100
English: ENG 101* and 102*
B. Social and Behavioral Sciences

AFA.
6 sem hrs
Select courses from two different disciplines from the following list. Courses in bold identify Non-Western and Diversity options: $\mathbf{N}$ indicates non-Western; $\mathbf{D}$ indicates diversity.
Anthropology: ANT 101 (N), 102, 110
Economics: ECN 100, 201, 202
Geography: GEO 120 (N), 220 (N), 235 (N)
History**: HIS 101 (N), 102 (N), 121, 122, 205 (N),
215 (N), 220 (N), 225 (N), 235 (N)
Political Science: PSC 100, 220, 240, 260
Psychology: PSY 100, 205, 215, 220, 226, 235
Sociology: SOC 100, 120 (D), 130, 210, 230 (D)
C. Physical and Life Sciences

AFA
7 sem hrs
Select at least one course from Physical Sciences and one course from Life Sciences. Select at least one lab course.
( $\mathbf{L}$ indicates a lab course.)
Physical Sciences
Astronomy: AST 100, 105 (4-L)
Chemistry: CHM 100, 101 (1-L), 102, 103 (1-L), 121 (4-L)
Earth Science: ESC 100, 101 (1-L), 110, 120 (4-L), 130
Geography: GEO 121 (4-L)
Geology: GLG 100, 101 (1-L), 102 (4-L), 103, 120
Physics: PHY 103, 104 (1-L), 111 (4-L), 221 (5-L)

## Life Sciences

Biology: BIO 100, 101 (1-L), 102, 103 (1-L), 110, 111 (1-L), 120 (4-L)
D. Mathematics

AFA.
Mathematics: MTH 101, 102, 107, 131 (4), 132 (4), 202, 210, 211 (4), 233 (4)

## E. Humanities

AFA.
6 sem hrs
Select two courses from the following list. Courses in bold identify Non-Western and Diversity options: N indicates non-Western; D indicates diversity
English: ENG 211, 212, 215, 220 (D), 221, 222, 225, 226, 229, 230, 235, 240, 245, 255 (D)
Film Studies: FLM 270
French: FRE 202
German: GER 202
History**: HIS 111, 112, 125
Humanities: HUM 101, 102 (N), 201
Philosophy: PHL 100, 101, 105, 110, 120 (N), 201, 202
Religious Studies: RLG 120 (N), 220, 230, 240
Spanish: SPN 202, 205, 215

## Degree Requirements Footnotes

* IAI General Education requires a C or better in these courses.
** No more than two history courses can be used to fulfill general education requirements.


## III. Additional College Requirements

## A. Non-Western and Diversity

One course satisfying degree requirements must have a Non-Western or Diversity emphasis. These courses are highlighted in bold in General Education Requirements Social and Behavioral Sciences (item II.B.) and Humanities (item II.E.). This is not an additional credit hour requirement.
IV. Area of Concentration/Elective Requirements Associate in Fine Arts (AFA). 30 sem hrs

Required core art courses $\qquad$ 21 sem hrs ART 101, 102, 110, 111, 120, 121, 222
Elective studio art courses. $\qquad$ 9 sem hrs
Select 9 semester hours from the following elective list; select courses from at least two media.
Ceramics: ART 130, 131
Graphic Design: GRD 173, 273
Painting: ART 260, 261
Photography: ART 140, 240
NOTE: Transfer institutions may require art majors to submit a portfolio for review.

## Degree Requirements

## Associate in Fine Arts (AFA) <br> Music Performance

## (AFA3) major code

The following sections list program requirements to achieve an Associate in Fine Arts (AFA) transfer degree with an emphasis in music performance at Waubonsee. This degree is designed to provide students a smooth transition to a four-year baccalaureate music degree program. Music majors may be required to demonstrate skill level through audition and placement testing at the transfer institution.

## I. College Requirements <br> A. Semester Hours

A total of 63 semester hours as specified in the following sections.
B. Grade-Points

A minimum cumulative grade point average of 2.0 (C average) in all coursework taken, regular student status and in good standing.

## C. Academic Residency

Meet the college's academic residency requirement: a minimum of 15 semester hours in courses must have been achieved at Waubonsee, excluding credit by proficiency.

## II. General Education Requirements

Since completion of the Associate in Fine Arts (AFA) degree does not fulfill the requirements of the Illinois General Education Core Curriculum, students must complete the general education requirements of the institution to which they transfer. Courses listed in section II are included on Waubonsee's IAI website as of March 2014. (Courses are 3 sem hrs unless indicated.)
Associate in Fine Arts (AFA) 28 sem hrs

## A. Communications

AFA.
9 sem hrs
Communications: COM 100
English: ENG 101* and 102*
B. Social and Behavioral Sciences

AFA. 3 sem hrs
Select course from the following list. Courses in bold identify Non-Western and Diversity options:
$\mathbf{N}$ indicates non-Western; D indicates diversity.
Anthropology: ANT 100 (N), 101 (N), 102, 110
Economics: ECN 100, 201, 202
Geography: GEO 120 (N), 220 (N), 235 (N)
History**: HIS 101 (N), 102 (N), 121, 122, 205 (N),
215 (N), 220 (N) (under IAl review), 225 (N), 235 (N)
Political Science: PSC 100, 220, 240, 260
Psychology: PSY 100, 205, 215, 220, 226, 235
Sociology: SOC 100, 120 (D), 130, 210, 230 (D)

## C. Physical and Life Sciences

AFA.
7 sem hrs
Select at least one course from Physical Sciences and one course from Life Sciences. Select at least one lab course.
( $\mathbf{L}$ indicates a lab course.)

## Physical Sciences

Astronomy: AST 100, 105 (4-L)
Chemistry: CHM 100, 101 (1-L), 102, 103 (1-L), 121 (4-L)
Earth Science: ESC 100, 101 (1-L),110,120 (4-L), 130
Geography: GEO 121 (4-L)
Geology: GLG 100, 101 (1-L), 102 (4-L), 103, 120
Physics: PHY 103, 104 (1-L), 111 (4-L), 221 (5-L)

## Life Sciences

Biology: BIO 100, 101 (1-L), 102, 103 (1-L), 110,
111 (1-L), 120 (4-L)

## D. Mathematics

AFA. 3 sem hrs
Mathematics: MTH 101, 102, 107, 131 (4), 132 (4), 202, 210, 211 (4), 233 (4)

## Degree Requirements Footnotes

* IAI General Education requires a C or better in these courses.
** No more than two history courses can be used to fulfill general education requirements.

Transfer
Degree Program

## E. Humanities

AFA.
Select two courses from the following list. Courses in bold identify Non-Western and Diversity options: $\mathbf{N}$ indicates non-Western; $\mathbf{D}$ indicates diversity.
English: ENG 211, 212, 215, 220 (D), 221, 222, 225, 226, 229, 230, 235, 240, 245, 255 (D)
Film Studies: FLM 270
French: FRE 202
German: GER 202
History**: HIS 111, 112, 125
Humanities: HUM 101, 102 (N), 201
Philosophy: PHL 100, 101, 105, 110, 120 (N), 201, 202
Religious Studies: RLG 120 (N), 220, 230, 240
Spanish: SPN 202, 205, 215

## III. Additional College Requirements

## A. Non-Western and Diversity

One course satisfying degree requirements must have a Non-Western or Diversity emphasis. These courses are highlighted in bold in General Education Requirements Social and Behavioral Sciences (item II.B.) and Humanities (item II.E.). This is not an additional credit hour requirement.

## IV. Area of Concentration/Elective Requirements AFA 35 sem hrs

## Required core music courses 23 sem hrs

 MUS 121 (4), 123, 124 (1), 200, 221, 222 (1), 223, 224 (1); 4 semester hours from the following based on proficiency: MUS 151 (2), 251 (2), 252 (2)Elective music courses $\qquad$ 12 sem hrs
Select 8 semester hours from the applied music courses and 4 semester hours from the performing ensemble courses. Applied Music Electives: MUS 280 (2), 281 (2), 282 (2), 283 (2), 284 (2), 285 (2), 286 (2), 287 (2), 288 (2) Performing Ensemble Electives: MUS 160 (1),161 (1), 162 (1), 164 (1), 166 (1), 167 (1), 168 (1), 170 (1), 171 (1), 175 (1.5), 176 (1.5)

NOTE: A music audition is required for admission into most four-year institutions.

# Transfer Degree Guidelines 

## Transfer Degree Guidelines

The following guidelines help students plan their individual transfer program. Course lists are patterned after the "Degree Requirements" in the previous section. Many different programs can be devised to meet the requirements of either an Associate in Arts or Associate in Science degree and to earn credit to transfer to a four-year school. Use the guidelines as a starting point. Counselors and students, working together with the transfer institution, can build a transfer degree program appropriate for each individual.

These course lists are ONLY guidelines. Transfer students should check early with their transfer school and Waubonsee's Counseling,
Advising and Transfer Center to ensure they are meeting ALL requirements.

## Areas of Concentration

Program guidelines are included for the following areas of concentration.
Art
Biology
Business
Chemistry
Clinical Laboratory Science
Communication
Computer Science
Criminal Justice
Early Childhood Education
Economics
Elementary Education
Engineering Science (see "Degree Requirements: AES")
English
Fine Arts (see "Degree Requirements: AFA")
General Science
Geography
Geology
Graphic Art
History
Mass Communication
Mathematics
Music
Nursing Transfer for BSN
Philosophy
Physical Education
Physics
Political Science

Psychology
Secondary Education
Social Work
Sociology
Special Education
Sport Management

## Purpose of Area of Concentration and Elective Requirements

The purpose of the area of concentration and elective requirements in Waubonsee transfer degrees is to prepare the student for a major course of study at a transfer institution. Students who have decided upon a major course of study to pursue at a transfer institution should see a Waubonsee counselor to choose elective courses that provide the foundation for that major. The Transfer Degree Guidelines show recommended programs of study for certain areas of concentration; however, other individual programs can be devised to meet both Waubonsee's graduation requirements and those of the chosen transfer institution.

Students who have not decided on a major course of study to pursue at a transfer institution or who do not intend to transfer may explore a combinations of any of the electives listed under the degrees.

Students intending to transfer should narrow their choice of a major at a transfer institution as soon as possible. Counseling offers students additional guidance for this process. Courses taken at other colleges and/or universities are evaluated upon request.

See the list under "Degree Requirements" for area of concentration and elective choices.

In order to help students prepare for a variety of popular college majors, certain areas of concentration have been developed, complete with a recommended curriculum. However, Waubonsee students should feel free to develop their own personalized course of study with the help of a counselor.

## How to Schedule Classes

To successfully complete an associate degree as a full-time or parttime student, students should work with a counselor to plan their courses each semester. Counseling has Student Academic Plan sheets that can be used as shown in the following example. Keep in mind these considerations:

- A minimum of 12 semester hours is considered full-time. To complete an associate degree in two years, students must take 15-18 hours per semester.
- Check course prerequisites. Some courses must be taken in a sequence or concurrently.
- Courses may only be offered certain semesters. Work with Counseling to plan coursework each semester.
- Register early. Classes close when they fill up or can be canceled for insufficient enrollment.
- Summer session (even with limited class selection) allows students to take classes they can't fit in otherwise.
- When choosing courses, students should consult degree requirements, read program guidelines and course descriptions, fill out a Student Academic Plan worksheet, get information from their intended transfer school, and work with a counselor or advisor. Many different programs are possible, not just the ones proposed in the guidelines.
- Students should make early contact with Counseling to get help determining their intended transfer school and coordinating their courses with the school's requirements.
- Students can run online degree audits to track their overall progress towards their certificate or degree. Degree audits are located in the Student tab of mywcc.
- Be sure to meet Waubonsee graduation requirements, including completing a graduation application, located on the Student tab of mywcc. (Students need to do this early in the semester before they intend to complete requirements.)


## Student Academic Plan Illustration

Here's an illustration: a full-time student planning to complete an Associate in Arts degree in the area of business administration in two years. The Student Academic Plan sheet has been completed; a check mark indicates courses to be taken first semester. Call the Counseling, Advising and Transfer Center (see directory). Students can also run their own online degree audits, located on the Student tab of mywcc.


Visit the Counseling, Advising and Transfer Center for help in completing your own academic plan (see directory).

# Area of Concentration: Art THIS IS AN EXAMPLETO GET STARTED. Please see a counselor for specific course information for your transfer college or university. 

AREA OF CONCENTRATION:
ART
College Requirements
I. General Education Requirements ..... 37
A. Communications $\boldsymbol{V}$ ..... 9
COM 100 Fund. of Speech Communication .....  3
ENG 101 First-Year Composition I.3
ENG 102 First-Year Composition II. .....  3
B. Social and Behavioral Sciences ..... 9
C. Physical and Life Sciences ..... 7
D. Mathematics ..... 3
MTH 101 College Mathematics or
MTH 102 Applied Practical Math ..... or
MTH 107 Basic Statistics .....  3
E. Humanities and Fine Arts ..... 9
Required Fine Arts courses:*ART 101 History of WesternArt-Ancient to Medieval ............................... 3
ART 102 History of Western Art-Renaissance to Modern Art. .....  3
II. Additional College Requirements ..... 2-3
A. Social Awareness/Personal Growth ..... 2-3
B. Non-Western and Diversity
III. Area of Concentration/ElectiveRequirements20-21
Recommendations include:
ART 110 Design I. .....  3
ART 111 Design II .....  3
ART 120 Basic Drawing I .....  3
ART 121 Basic Drawing II .....  3
$\checkmark$ Assessment required.* Students planning to attend Northern Illinois University shouldtake ART 100, not ART 101.
Note: Portfolios are typically required for entrance into afour-year institution.
Note: Due to Art Major and Art Education requirements, students should meet with a counselor as soon as possible about their program of study.

This is ONLY an EXAMPLE. Transfer students should check early with their transfer school and Counseling to ensure they are meeting ALL requirements. Transfer schools may vary in their requirements.

# Area of Concentration: Biology/Pre-Med THIS IS AN EXAMPLETO GET STARTED. <br> Please see a counselor for specific course information for your transfer college or university. 

AREA OF CONCENTRATION:BIOLOGY/PRE-MED
College Requirements
I. General Education Requirements ..... 31
A. Communications $\boldsymbol{V}$ ..... 9
COM 100 Fund. of Speech Communication .....  3
ENG 101 First-Year Composition I ..... 3
ENG 102 First-Year Composition II. .....  3
B. Social and Behavioral Sciences ..... 6
C. Physical and Life Sciences ..... 7
BIO 120 Principles of Biology I. .....
CHM 121 General Chemistry ..... 4
D. Mathematics $\boldsymbol{V}$ * ..... 3
MTH 211 Calculus for Business and Social Science .. 4or
MTH 131 Calculus With Analytic Geometry I ..... 4
E. Humanities and Fine Arts ..... 6
II. Additional College Requirements ..... 6-8
A. Physical and Life Sciences ..... 3-4
BIO 122 Principles of Biology II .....  4
B. Mathematics ..... 3-4
MTH 129 Precalculus I .....  3
C. Non-Western and Diversity
III. Area of Concentration/ElectiveRequirements*20-21
Recommendations include:
CHM 122 Chemistry/Qualitative Analysis .....  4
MTH 130 Precalculus II .....  3
PHY 111 Introduction to Physics I. .....  4or
PHY 221 General Physics I .....  5
PHY 112 Introduction to Physics II. .....  4
or
PHY 222 General Physics II .....  5
$\checkmark$ Assessment required.

* Students are encouraged to take one additional social and behavioral science and one additional humanities and fine arts course within the elective area to meet general education requirements at transfer institutions.

This is ONLY an EXAMPLE. Transfer students should check early with their transfer school and Counseling to ensure they are meeting ALL requirements. Transfer schools may vary in their requirements.

# Area of Concentration: Business THIS IS AN EXAMPLETO GET STARTED. <br> <br> Please see a counselor for specific course <br> <br> Please see a counselor for specific course information for your transfer college or university. 

AREA OF CONCENTRATION:
BUSINESS(Accounting, Management, Finance, Marketing orOperations Management)
College Requirements
I. General Education Requirements ..... 37
A. Communications $\boldsymbol{V}$ ..... 9
COM 100 Fund. of Speech Communication .....  3
ENG 101 First-Year Composition I ..... 3
ENG 102 First-Year Composition II. ..... 3
B. Social and Behavioral Sciences. ..... 9
ECN 201 Principles of Economics-Micro .....  3
ECN 202 Principles of Economics-Macro .....  3
PSY 100 Introduction to Psychology ..... 3
C. Physical and Life Sciences ..... 7
D. Mathematics $\boldsymbol{V}^{*} \mathbf{T}$. ..... 3
MTH 211 Calculus/Business and Social Science ..... 4
E. Humanities and Fine Arts ..... 9
II. Additional College Requirements ..... 2-3
A. Social Awareness/Personal Growth ..... 2-3
B. Non-Western and Diversity
III. Area of Concentration/ElectiveRequirements**14-18
Recommendations include:
ACC 202 Financial Accounting .....  3
ACC 203 Managerial Accounting .....  3
BUS 100 Introduction to Business .....  3
BUS 207 Business Statistics .....  3
BUS 210 Legal Environment of Business .....  3
CIS 110 Business Information Systems .....  3
MTH 129 Precalculus I ..... 3
$\checkmark$ Assessment required.

* A two semester math sequence may be required by transfer school.
** For Aurora University, students should take BUS 100, ACC 202, ACC 203, MGT 200 and MKT 200.
T For Aurora University, students may take MTH 107.
This is ONLY an EXAMPLE. Transfer students should check early with their transfer school and Counseling to ensure they are meeting ALL requirements. Transfer schools may vary in their requirements.


## Area of Concentration: Chemistry THIS IS AN EXAMPLETO GET STARTED. Please see a counselor for specific course information for your transfer college or university.

AREA OF CONCENTRATION:
CHEMISTRY
College Requirements
I. General Education Requirements ..... 31
A. Communications $\boldsymbol{V}$ ..... 9
COM 100 Fund. of Speech Communication .....  3
ENG 101 First-Year Composition I ..... 3
ENG 102 First-Year Composition II. ..... 3
B. Social and Behavioral Sciences ..... 6
C. Physical and Life Sciences ..... 7
CHM 121 General Chemistry. ..... 4
D. Mathematics $\boldsymbol{v}$ ..... 3
MTH 131 Calculus/Analytic Geometry I .....  4
E. Humanities and Fine Arts ..... 6
II. Additional College Requirements ..... 6-8
A. Physical and Life Sciences ..... 3-4
PHY 221 General Physics I. .....  5
B. Mathematics $\boldsymbol{V}$. ..... 3-4
MTH 132 Calculus With Analytic Geometry II. ..... 4
C. Non-Western and Diversity
III. Area of Concentration/ElectiveRequirements*21-23
Recommendations include:
CHM 122 Chemistry/Qualitative Analysis .....  4
CHM 231 Organic Chemistry I. .....  4
CHM 232 Organic Chemistry II .....  4
PHY 222 General Physics II ..... 5
$\checkmark$ Assessment required.

* Students are encouraged to take one additional social and behavioral science and one additional humanities and fine arts course within the elective area to meet general education requirements at transfer institutions.

This is ONLY an EXAMPLE. Transfer students should check early with their transfer school and Counseling to ensure they are meeting ALL requirements. Transfer schools may vary in their requirements.

# Area of Concentration: Clinical Laboratory Science THIS IS AN EXAMPLETO GET STARTED. <br> Please see a counselor for specific course information for your transfer college or university. 

AREA OF CONCENTRATION:CLINICAL LABORATORY SCIENCE
College Requirements
I. General Education Requirements ..... 31
A. Communications $\boldsymbol{V}$ ..... 9
COM 100 Fund. of Speech Communication ..... 3
ENG 101 First-Year Composition I ..... 3
ENG 102 First-Year Composition II. ..... 3
B. Social and Behavioral Sciences ..... 6
C. Physical and Life Sciences ..... 7
BIO 120 Principles of Biology I. ..... 4
CHM 121 General Chemistry ..... 4
D. Mathematics $\boldsymbol{V}$ ..... 3
MTH 107 Basic Statistics ..... 3
E. Humanities and Fine Arts ..... 6
II. Additional College Requirements ..... 6-8
A. Physical and Life Sciences ..... 3-4
CHM 122 Chemistry/Qualitative Analysis .....  4
B. Mathematics $\boldsymbol{V}$ ..... 3-4
MTH 129 Precalculus I ..... 3
C. Non-Western and Diversity
III. Area of Concentration/ElectiveRequirements*21-23
Recommendations include:
BIO 122 Principles of Biology II .....  4
BIO 250 Microbiology .....  4
BIO 270 Anatomy and Physiology I .....  4
BIO 272 Anatomy and Physiology II .....  4
$\checkmark$ Assessment required.* Students are encouraged to take one additional social andbehavioral science and one additional humanities and finearts course within the elective area to meet general educationrequirements at transfer institutions.
This is ONLY an EXAMPLE. Transfer students should check early with their transfer school and Counseling to ensure they are meeting ALL requirements. Transfer schools may vary in their requirements.

## Area of Concentration: Communication THIS IS AN EXAMPLETO GET STARTED. Please see a counselor for specific course information for your transfer college or university.

AREA OF CONCENTRATION: COMMUNICATION

## College Requirements

I. General Education Requirements ........................ 37
A. Communications $\downarrow$...................................................... 9

COM 100 Fund. of Speech Communication................ 3
ENG 101 First-Year Composition I.............................. 3
ENG 102 First-Year Composition II.............................. 3
B. Social and Behavioral Sciences................................... 9
C. Physical and Life Sciences ......................................... 7
D. Mathematics V .............................................................. 3

MTH $101 \begin{aligned} & \text { College Mathematics } \\ & \\ & \text { or }\end{aligned}$
MTH 102 Applied Practical Mathematics or
MTH 107 Basic Statistics .............................................. 3
E. Humanities and Fine Arts ............................................. 9
II. Additional College Requirements .......................2-3
A. Social Awareness/Personal Growth ....................... 2-3
B. Non-Western and Diversity
III. Area of Concentration/Elective Requirements*
Recommendations include:
COM 120 Interpersonal Communication..................... 3
COM 122 Group Communication................................. 3
COM 200 Advanced Speech Communication............. 3
$\checkmark$ Assessment required.

* Transfer school may require a second language.


## Area of Concentration: Computer Science THIS IS AN EXAMPLETO GET STARTED. <br> Please see a counselor for specific course information for your transfer college or university.

AREA OF CONCENTRATION:

COMPUTER SCIENCE

## College Requirements

I. General Education Requirements ........................ 31
A. Communications V ....................................................... 9

COM 100 Fund. of Speech Communication................ 3
ENG 101 First-Year Composition I.............................. 3
ENG 102 First-Year Composition II.............................. 3
B. Social and Behavioral Sciences................................... 6
C. Physical and Life Sciences* ......................................... 7
D. Mathematics $\boldsymbol{V}^{*} . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~ . ~ 3 ~ 8 ~$

MTH 131 Calculus With Analytic Geometry I
or
MTH 211 Calculus for Business \& Social Science...... 4
E. Humanities and Fine Arts ............................................. 6
II. III. $\qquad$ Additional College Requirements
6-8
A. Physical and Life Sciences ....................................... 3-4
B. Mathematics.................................................................3-4

MTH 129 Precalculus I.................................................. 3
C. Non-Western and Diversity
III. IV $\qquad$ Area of Concentration/Elective
Requirements* 21-23
Recommendations include: CIS 115 Introduction to Programing .. 3
$\checkmark$ Assessment required.

* Students are encouraged to take one additional social and behavioral science and one additional humanities and fine arts course within the elective area to meet general education requirements at transfer institutions.


## Area of Concentration: Criminal Justice THIS IS AN EXAMPLETO GET STARTED. <br> Please see a counselor for specific course information for your transfer college or university.

AREA OF CONCENTRATION:
CRIMINAL JUSTICE
College Requirements
I. General Education Requirements ..... 37
A. Communications $\boldsymbol{V}$ ..... 9
COM 100 Fund. of Speech Communication .....  3
ENG 101 First-Year Composition I. ..... 3
ENG 102 First-Year Composition II .....  3
B. Social and Behavioral Sciences ..... 9
C. Physical and Life Sciences ..... 7
D. Mathematics ..... 3
MTH 101 College Mathematics orMTH 102 Applied Practical Mathematicsor
MTH 107 Basic Statistics .....  3
E. Humanities and Fine Arts ..... 9
II. Additional College Requirements ..... 2-3
A. Social Awareness/Personal Growth ..... 2-3
B. Non-Western and Diversity
III. Area of Concentration/ElectiveRequirements20-21
Recommendations include:
CIS 110 Business Information Systems* .....  3
CRJ 100 Introduction to Criminal Justice .....  3
CRJ 101 Introduction to Corrections .....  3
CRJ 107 Juvenile Justice ..... 3
CRJ 220 Criminal Law ..... 3
CRJ 230 Criminology .....  3
$\checkmark$ Assessment required.* Some transfer schools will require criminal justice students todemonstrate knowledge of computer systems and proficiency inthe use of office software and the Internet.
This is ONLY an EXAMPLE. Transfer students should check early with their transfer school and Counseling to ensure they are meeting ALL requirements. Transfer schools may vary in their requirements.

# Area of Concentration: Early Childhood Education THIS IS AN EXAMPLETO GET STARTED. Please see a counselor for specific course information for your transfer college or university. 

AREA OF CONCENTRATION:
EARLY CHILDHOOD EDUCATION
College Requirements
I. General Education Requirements ..... 31
A. Communications $\boldsymbol{V}$ ..... 9
COM 100 Fund. of Speech Communication ..... 3
ENG 101 First-Year Composition I. ..... 3
ENG 102 First-Year Composition II ..... 3
B. Social and Behavioral Sciences ..... 6
HIS 121 American History to 1865 or
HIS 122 American History Since 1865 .....  3
PSY 100 Introduction to Psychology ..... 3
C. Physical and Life Sciences ..... 7
D. Mathematics ..... 3
MTH 202 Math for Elementary Teachers II ..... 3
E. Humanities and Fine Arts** ..... 6
II. Additional College Requirements ..... 6-8
A. Physical and Life Sciences ..... 3-4
B. Mathematics ..... 3-4
MTH 201 Math for Elementary Teachers I .....  3
C. Non-Western and Diversity

## III. Area of Concentration/Elective

 Requirements*21-23Recommendations include:
ECE 115 Child Growth and Development. .....  3
EDU 200 Introduction to Education .....  3
EDU 220 Introduction to Special Education .....  3
$\checkmark$ Assessment required.

* Students are encouraged to take one additional social and behavioral science and one additional humanities and fine arts course within the elective area to meet general education requirements at transfer institutions.

NOTE: Because of teacher licensure, transfer school requirements and WCC graduation requirements, students should meet with a counselor as soon as they declare early childhood education as their intended major.
Note the following:

- Students must successfully complete the TAP, ACT Plus Writing or SAT before being admitted into most schools of education in Illinois. For updated information, please meet with a counselor or visit www.isbe.net/licensure/html/testing.htm.
- The Illinois State Board of Education will accept a minimum ACT Plus Writing composite score of 22 and combined English/Writing score of 19 or SAT (critical reading + mathematics=1030 and a score of 450 on writing) in lieu of the TAP. For updated information please visit www.isbe.net/ licensure/html/testing.htm.
- Effective July 1, 2015, all test of basic skills, including applicable ACT Plus Writing and SAT scores are valid indefinitely.

This is ONLY an EXAMPLE. Transfer students should check early with their transfer school and Counseling to ensure they are meeting ALL requirements. Transfer schools may vary in their requirements.

## Area of Concentration: Economics THIS IS AN EXAMPLETO GET STARTED. <br> Please see a counselor for specific course information for your transfer college or university.

AREA OF CONCENTRATION:
ECONOMICS
College Requirements
I. General Education Requirements ..... 37
A. Communications $\boldsymbol{V}$ ..... 9
COM 100 Fund. of Speech Communication. ..... 3
ENG 101 First-Year Composition I ..... 3
ENG 102 First-Year Composition II .....  3
B. Social and Behavioral Sciences ..... 9
ECN 201 Principles of Economics-Micro ..... 3
ECN 202 Principles of Economics-Macro .....  3
C. Physical and Life Sciences ..... 7
D. Mathematics $\boldsymbol{V}^{*}$ ..... 3
MTH 211 Calculus/Business and Social Science* ..... 4
or
MTH 131 Calculus With Analytic Geometry I .....  .4
E. Humanities and Fine Arts ..... 9
II. Additional College Requirements ..... 2-3
A. Social Awareness/Personal Growth ..... 2-3
B. Non-Western and Diversity
III. Area of Concentration/Elective Requirements** ..... 20-21
MTH 107 Basic Statistic .....  3
MTH 129 Precalculus I ..... 3
$\checkmark$ Assessment required.* A two semester math sequence is required by most transferschools. Take MTH 131 and 132 or MTH 210 and 211. Meetwith a counselor to discuss options.** Transfer school may require a second language.

This is ONLY an EXAMPLE. Transfer students should check early with their transfer school and Counseling to ensure they are meeting ALL requirements. Transfer schools may vary in their requirements.

# Area of Concentration: Elementary Education THIS IS AN EXAMPLE TO GET STARTED. 

# Please see a counselor for specific course information for your transfer college or university. 

## AREA OF CONCENTRATION: <br> ELEMENTARY EDUCATION

## College Requirements

I. General Education Requirements ..... 31
A. Communications $\boldsymbol{V}$ ..... 9
COM 100 Fund. of Speech Communication .....  3
ENG 101 First-Year Composition I ..... 3
ENG 102 First-Year Composition II. .....  .3
B. Social and Behavioral Sciences ..... 6
HIS 121 American History to 1865or
HIS 122 American History Since 1865 ..... 3
PSY 100 Introduction to Psychology .....  3
C. Physical and Life Sciences ..... 7
D. Mathematics ..... 3
MTH 202 Math for Elementary Teachers II ..... 3
E. Humanities and Fine Arts ..... 6
II. Additional College Requirements ..... 6-8
A. Physical and Life Sciences ..... 3-4
B. Mathematics ..... 3-4
MTH 201 Math for Elementary Teachers I .....  3
C. Non-Western and Diversity

## III. Area of Concentration/Elective

 Requirements 21-23
## Recommendations include:

EDU 200 Introduction to Education ............................ 3
EDU 202 Clinical Experience in Education ................. 3
EDU 220 Introduction to Special Education................ 3
$\checkmark$ Assessment required.
*Students planning to attend Northern Illinois University should take HIS 121 and HIS 122.
** Most education programs in Illinois are now requiring college algebra in addition to MTH 201 and MTH 202.
*** Students are encouraged to take one additional social and behavioral science and one additional humanities and fine arts course within the elective area to meet general education requirements at transfer institutions.
NOTE: Because of teacher licensure requirements, transfer school requirements and WCC graduation requirements, students should meet with a counselor as soon as they declare education as their intended major. Note the following:

- Students must successfully complete the TAP, ACT Plus Writing or SAT before being admitted into most schools of education in Illinois. For updated information, please meet with a counselor or visit www.isbe.net/licensure/html/testing.htm.
- The Illinois State Board of Education will accept a minimum ACT Plus Writing composite score of 22 and combined English/Writing score of 19 or SAT (critical reading + mathematics=1030 and a score of 450 on writing) in lieu of the TAP. For updated information please visit www.isbe.net/ licensure/html/testing.htm.
- Effective July 1, 2015, all test of basic skills, including applicable ACT Plus Writing and SAT scores are valid indefinitely.

This is ONLY an EXAMPLE. Transfer students should check early with their transfer school and Counseling to ensure they are meeting ALL requirements. Transfer schools may vary in their requirements.

# Area of Concentration: English THIS IS AN EXAMPLETO GET STARTED. Please see a counselor for specific course information for your transfer college or university. 

AREA OF CONCENTRATION:
ENGLISH
College Requirements
I. General Education Requirements ..... 37
A. Communications $\boldsymbol{V}$ ..... 9
COM 100 Fund. of Speech Communication ..... 3
ENG 101 First-Year Composition I ..... 3
ENG 102 First-Year Composition II .....
B. Social and Behavioral Sciences ..... 9
C. Physical and Life Sciences ..... 7
D. Mathematics ..... 3
MTH 101 College Mathematicsor
MTH 102 Applied Practical Mathematics
or
MTH 107 Basic Statistics ..... 3
E. Humanities and Fine Arts ..... 9
ENG 211 American Literature to 1865 .....  3
ENG 221 British Literature to 1800 ..... 3
II. Additional College Requirements ..... 2-3
A. Social Awareness/Personal Growth ..... 2-3
B. Non-Western and Diversity

## III. Area of Concentration/Elective

 Requirements*20-21$\checkmark$ Assessment required.

* For English majors, 12 hours of foreign language, completion through the fourth level, is recommended.

This is ONLY an EXAMPLE. Transfer students should check early with their transfer school and Counseling to ensure they are meeting ALL requirements. Transfer schools may vary in their requirements.

# Area of Concentration: General Science THIS IS AN EXAMPLETO GET STARTED. <br> Please see a counselor for specific course information for your transfer college or university. 

## AREA OF CONCENTRATION: <br> GENERAL SCIENCE

## College Requirements

I. General Education Requirements ........................ 31
A. Communications V ....................................................... 9

COM 100 Fund. of Speech Communication................ 3
ENG 101 First-Year Composition I.............................. 3
ENG 102 First-Year Composition II.............................. 3
B. Social and Behavioral Sciences................................... 6
C. Physical and Life Sciences .......................................... 7

PHY 221 General Physics I.......................................... 5
or
PHY 111 Introduction to Physics I.............................. 4
BIO 120 Principles of Biology I................................... 4
D. Mathematics $\boldsymbol{V}^{*}$........................................................... 3

MTH 211 Calculus for Business and Social Science .. 4 or
MTH 131 Calculus With Analytic Geometry I.............. 4
E. Humanities and Fine Arts ............................................. 6
II. Additional College Requirements .......................6-8
A. Physical and Life Sciences ........................................ 3-4

CHM 121 General Chemistry........................................ 4
B. Mathematics ...............................................................3-4

MTH 129 Precalculus I.................................................. 3
C. Non-Western and Diversity
III. Area of Concentration/ElectiveRequirements*21-23
$\checkmark$ Assessment required.

* Students are encouraged to take one additional social and behavioral science and one additional humanities and fine arts course within the elective area to meet general education requirements at transfer institutions.
This is ONLY an EXAMPLE. Transfer students should check early with their transfer school and Counseling to ensure they are meeting ALL requirements. Transfer schools may vary in their requirements.


## Area of Concentration: Geography THIS IS AN EXAMPLETO GET STARTED. Please see a counselor for specific course information for your transfer college or university.

AREA OF CONCENTRATION:GEOGRAPHY
College Requirements
I. General Education Requirements ..... 31
A. Communications $\boldsymbol{V}$ ..... 9
COM 100 Fund. of Speech Communication .....  3
ENG 101 First-Year Composition I. ..... 3
ENG 102 First-Year Composition II. .....  3
B. Social and Behavioral Sciences ..... 6
GEO 220 Geography of Developing World ..... 3
C. Physical and Life Sciences ..... 7
GEO 121 Physical Geography ..... 4
D. Mathematics $\boldsymbol{V}$ ..... 3
E. Humanities and Fine Arts ..... 6
II. Additional College Requirements ..... 6-8
A. Physical and Life Sciences ..... 3-4
B. Mathematics ..... 3-4
MTH 129 Precalculus I .....  3
C. Non-Western and Diversity
III. Area of Concentration/ElectiveRequirements*21-23
Recommendations include:
ESC 120 Introduction to Meteorology .....  4
ESC 130 Introduction to Oceanography .....  3
GEO 120 World Regional Geography .....  3
MTH 130 Precalculus II .....  3
$\checkmark$ Assessment required.

* Students are encouraged to take one additional social and behavioral science and one additional humanities and fine arts course within the elective area to meet general education requirements at transfer institutions.
This is ONLY an EXAMPLE. Transfer students should check early with their transfer school and Counseling to ensure they are meeting ALL requirements. Transfer schools may vary in their requirements.


# Area of Concentration: Geology THIS IS AN EXAMPLE TO GET STARTED. Please see a counselor for specific course information for your transfer college or university. 

AREA OF CONCENTRATION:
GEOLOGY
College Requirements
I. General Education Requirements ..... 31
A. Communications $\boldsymbol{V}$ ..... 9
COM 100 Fund. of Speech Communication. .....  3
ENG 101 First-Year Composition I ..... 3
ENG 102 First-Year Composition II .....  3
B. Social and Behavioral Sciences ..... 6
C. Physical and Life Sciences ..... 7
GLG 100 Intro to Physical Geology ..... 3
GLG 101 Intro to Physical Geology Lab. ..... 1
D. Mathematics $\boldsymbol{V}$ ..... 3
MTH 131 Calculus/Analytic Geometry I .....  .4
E. Humanities and Fine Arts ..... 6
II. Additional College Requirements ..... 6-8
A. Physical and Life Sciences ..... 3-4
CHM 121 General Chemistry .....  4
B. Mathematics ..... 3-4
MTH 129 Precalculus I .....  3
C. Non-Western and Diversity
III. Area of Concentration/ElectiveRequirements*21-23
Recommendations include:
CHM 122 Chemistry/Qualitive Analysis .....  4
GLG 103 Enviromental Geology .....  3
MTH 130 Precalculus II .....  3
MTH 132 Calculus/Analytic Geometry II .....  4
$\checkmark$ Assessment required.

* Students are encouraged to take one additional social and behavioral science and one additional humanities and fine arts course within the elective area to meet general education requirements at transfer institutions.

This is ONLY an EXAMPLE. Transfer students should check early with their transfer school and Counseling to ensure they are meeting ALL requirements. Transfer schools may vary in their requirements.

# Area of Concentration: Graphic Art THIS IS AN EXAMPLETO GET STARTED. Please see a counselor for specific course information for your transfer college or university. 

AREA OF CONCENTRATION:
GRAPHIC ART
College Requirements
I. General Education Requirements ..... 37
A. Communications $\boldsymbol{V}$ ..... 9
COM 100 Fund. of Speech Communication .....  3
ENG 101 First-Year Composition I. ..... 3
ENG 102 First-Year Composition II. .....  .3
B. Social and Behavioral Sciences ..... 9
C. Physical and Life Sciences ..... 7
D. Mathematics $\boldsymbol{V}$ ..... 3
MTH 101 College Mathematics
or
MTH 102 Applied Practical Math or
MTH 107 Basic Statistics .....  .3
E. Humanities and Fine Arts ..... 9
Required Fine Arts courses:+
*ART 101 History of Western Art- Ancient to Medieval ..... 3
ART 102 History of Western Art- Renaissance to Modern Art ..... 3
II. Additional College Requirements ..... 2-3
A. Social Awareness/Personal Growth ..... 2-3
B. Non-Western and Diversity
III. Area of Concentration/ElectiveRequirements20-21
Recommendations include:
ART 110 Design I .....  3
ART 111 Design II .....  3
ART 120 Basic Drawing I .....  3
ART 121 Basic Drawing II .....  3
$\checkmark$ Assessment required.* Students planning to attend Northern Illinois University shouldtake ART 100, not ART 101.Note: Portfolios are typically required for entrance into a four-year institution.
This is ONLY an EXAMPLE. Transfer students should check early with their transfer school and Counseling to ensure they are meeting ALL requirements. Transfer schools may vary in their requirements.

# Area of Concentration: History THIS IS AN EXAMPLETO GET STARTED. <br> <br> Please see a counselor for specific course <br> <br> Please see a counselor for specific course information for your transfer college or university. 

AREA OF CONCENTRATION:HISTORY
College Requirements
I. General Education Requirements ..... 37
A. Communications $\boldsymbol{V}$ ..... 9
COM 100 Fund. of Speech Communication .....  3
ENG 101 First-Year Composition I ..... 3
ENG 102 First-Year Composition II. .....  3
B. Social and Behavioral Sciences* ..... 9
PSC 100 Introduction to American Government ..... 3
HIS 121 American History to 1865 .....  3
HIS 122 American History Since 1865 .....  3
C. Physical and Life Sciences ..... 7
D. Mathematics ..... 3
MTH 101 College Mathematics ..... orMTH 102 Applied Practical Mathematicsor
MTH 107 Basic Statistics ..... 3
E. Humanities and Fine Arts* ..... 9
II. Additional College Requirements ..... 2-3
A. Social Awareness/Personal Growth ..... 2-3
B. Non-Western and Diversity
III. Area of Concentration/ElectiveRequirements**20-21
Recommendations include:
HIS 101 World History to 1500. .....  3
HIS 102 World History Since 1500 .....  3
HIS 111 Western Civilization to 1648. .....  3
HIS 112 Western Civilization Since 1648 .....  3
$\checkmark$ Assessment required.* No more than two history courses can be used to fulfill generaleducation requirements.
** Transfer school may require a second language.
This is ONLY an EXAMPLE. Transfer students should check early with their transfer school and Counseling to ensure they are meeting ALL requirements. Transfer schools may vary in their requirements.

# Area of Concentration: Mass Communication THIS IS AN EXAMPLETO GET STARTED. <br> <br> Please see a counselor for specific course <br> <br> Please see a counselor for specific course <br> information for your transfer college or university. 

## AREA OF CONCENTRATION: MASS COMMUNICATION

## College Requirements

I. General Education Requirements ........................ 37
A. Communications V ....................................................... 9

COM 100 Fund. of Speech Communication................ 3
ENG 101 First-Year Composition I.............................. 3
ENG 102 First-Year Composition II.............................. 3
B. Social and Behavioral Sciences.................................... 9
C. Physical and Life Sciences .......................................... 7
D. Mathematics V .............................................................. 3

MTH 101 College Mathematics or
MTH 102 Applied Practical Mathematics or
MTH 107 Basic Statistics .............................................. 3
E. Humanities and Fine Arts ............................................ 9
II. Additional College Requirements .......................2-3
A. Social Awareness/Personal Growth ....................... 2-3
B. Non-Western and Diversity
III. Area of Concentration/Elective Requirements*20-21
Recommendations include:
MCM 130 Introduction to Mass Communication .....  3
MCM 140 Television Production I .....  3
MCM 215 Basic News Writing .....  3
MCM 245 Mass Media Ethics \& Law .....  3
$\checkmark$ Assessment required.* Transfer school may require a second language.
This is ONLY an EXAMPLE. Transfer students should check early with their transfer school and Counseling to ensure they are meeting ALL requirements. Transfer schools may vary in their requirements.

# Area of Concentration: Mathematics THIS IS AN EXAMPLETO GET STARTED. <br> Please see a counselor for specific course information for your transfer college or university. 

## AREA OF CONCENTRATION: <br> MATHEMATICS

## College Requirements

I. General Education Requirements ..... 31
A. Communications $\boldsymbol{V}$ ..... 9
COM 100 Fund. of Speech Communication ..... 3
ENG 101 First-Year Composition I ..... 3
ENG 102 First-Year Composition II. ..... 3
B. Social and Behavioral Sciences ..... 6
C. Physical and Life Sciences ..... 7
D. Mathematics $\boldsymbol{V}$ ..... 3
MTH 131 Calculus/Analytic Geometry I ..... 4
E. Humanities and Fine Arts ..... 6
II. Additional College Requirements ..... 6-8
A. Physical \& Life Sciences ..... 3-4
B. Mathematics ..... 3-4
MTH 132 Calculus/Analytic Geometry II ..... 4
C. Non-Western and DiversityIII. Area of Concentration/ElectiveRequirements*21-23
Recommendations include:
MTH 233 Calculus/Analytic Geometry III .....  4
MTH 240 Differential Equations. .....  3
$\checkmark$ Assessment required

* Students are encouraged to take one additional social and behavioral science and one additional humanities and fine arts course within the elective area to meet general education requirements at transfer institutions.
Note: Some transfer schools require a computer language; consult with a counselor.

This is ONLY an EXAMPLE. Transfer students should check early with their transfer school and Counseling to ensure they are meeting ALL requirements. Transfer schools may vary in their requirements.

# Area of Concentration: Music THIS IS AN EXAMPLETO GET STARTED. <br> <br> Please see a counselor for specific course <br> <br> Please see a counselor for specific course information for your transfer college or university. 

AREA OF CONCENTRATION:MUSIC
College Requirements
I. General Education Requirements ..... 37
A. Communications ..... 9
COM 100 Fund. of Speech Communication .....  3
ENG 101 First-Year Composition I ..... 3
ENG 102 First-Year Composition II .....  3
B. Social and Behavioral Sciences ..... 9
C. Physical and Life Sciences ..... 7
D. Mathematics ..... 3
MTH 101 College Mathematics

                    orMTH 102 Applied Practical Mathor
    MTH 107 Basic Statistics .....  3
E. Humanities and Fine Arts ..... 9
MUS 101 Music of the World. ..... 3
Humanities ..... 6
II. Additional College Requirements ..... 2-3
A. Social Awareness/Personal Growth ..... 2-3
B. Non-Western and DiversityIII. Area of Concentration/ElectiveRequirements*20-21
Recommendations include:
MUS 121 Theory of Music I .....  4
MUS 123 Theory of Music II .....  3
MUS 221 Theory of Music III .....  3
MUS 223 Theory of Music IV ..... 3
MUS 124 Aural Skills II: Developing the Musical Ear .....  1
MUS 222 Aural Skills III:
Developing the Musical Ear .....  1
MUS 224 Aural Skills IV:Developing the Musical Ear......................... 1
Assessment required.* Transfer school may require a second language.Note: A music audition is required for admissioninto most four-year institutions. Check withtransfer school for teacher licensure requirements.It is recommended to take applied and ensemblemusic classes in preparation for auditions.

This is ONLY an EXAMPLE. Transfer students should check early with their transfer school and Counseling to ensure they are meeting ALL requirements. Transfer schools may vary in their requirements.

# Area of Concentration: Nursing Transfer for BSN THIS IS AN EXAMPLETO GET STARTED. <br> Please see a counselor for specific course information for your transfer college or university. 

AREA OF CONCENTRATION:
NURSING TRANSFER FOR BSN
College Requirements
I. General Education Requirements ..... 31
A. Communications $\boldsymbol{V}$ ..... 9
COM 100 Fund. of Speech Communication .....  3
ENG 101 First-Year Composition I. ..... 3
ENG 102 First-Year Composition II ..... 3
B. Social and Behavioral Sciences ..... 6
PSY 100 Introduction to Psychology .....  3
C. Physical and Life Sciences ..... 7
BIO 120 Principles of Biology ..... 4
CHM 100 Introduction to Chemistry .....  3
and
CHM 101 Introduction to Chemistry Lab .....  1
or
CHM 121 General Chemistry ..... 4
D. Mathematics $\boldsymbol{V}$ ..... 3
MTH 107 Basic Statistics ..... 3
E. Humanities and Fine Arts ..... 6
II. Additional College Requirements ..... 6-8
A. Physical \& Life Sciences ..... 3-4
BIO 250 Microbiology .....  4
B. Mathematics* ..... 3-4
MTH 129 Precalculus I ..... 3or
MTH 101 College Mathematics ..... 3
C. Non-Western and Diversity
III. Area of Concentration/ElectiveRequirements**21-23
Recommendations include:
BIO 200 Nutrition .....  3
BIO 270 Anatomy/Physiology I .....  4
BIO 272 Anatomy/Physiology II .....  4
PSY 205 Life-Span Psychology ..... 3
$\checkmark$ Assessment required.*Students planning on attending Aurora University should take MTH 111.
**Students are encouraged to take one additional Social and Behavioral Science and one additional Humanities and Fine Arts within the elective area to meet General Education requirements at transfer institutions.
NOTE: This sequence of courses is for students intending to transfer to a baccalaureate program for a Bachelor of Science in Nursing. Students who want to enter the nursing field immediately upon their graduation from Waubonsee should enroll in the AAS nursing degree career program.

This is ONLY an EXAMPLE. Transfer students should check early with their transfer school and Counseling to ensure they are meeting ALL requirements. Transfer schools may vary in their requirements.

## Area of Concentration: Philosophy THIS IS AN EXAMPLETO GET STARTED. <br> Please see a counselor for specific course information for your transfer college or university.

AREA OF CONCENTRATION
PHILOSOPHY
College Requirements
I. General Education Requirements ..... 37
A. Communications $\boldsymbol{V}$ ..... 9
COM 100 Fund. of Speech Communication .....  3
ENG 101 First-Year Composition I. ..... 3
ENG 102 First-Year Composition II .....  3
B. Social and Behavioral Sciences ..... 9
C. Physical and Life Sciences ..... 7
D. Mathematics ..... 3
MTH 101 College Mathematics ..... or
MTH 102 Applied Practical Mathematicsor
MTH 107 Basic Statistics .....  3
E. Humanities and Fine Arts ..... 9
PHL 100 Introduction to Philosophy ..... 3
II. Additional College Requirements ..... 2-3
A. Social Awareness/Personal Growth ..... 2-3
B. Non-Western and Diversity
III. Area of Concentration/ElectiveRequirements*20-21
Recommendations include:
PHL 101 Introduction to Logic .....  3
PHL 105 Introduction to Ethics .....  3
PHL 110 Introduction to Critical Thinking .....  3
PHL 120 Introduction to World Religions ..... 3
PHL 201 History of Philosophy I ..... 3
PHL 202 History of Philosophy II .....  3
$\checkmark$ Assessment required.*Transfer school may require a second language.This is ONLY an EXAMPLE. Transfer students should checkearly with their transfer school and Counseling to ensurethey are meeting ALL requirements. Transfer schools mayvary in their requirements.

# Area of Concentration: Physical Education THIS IS AN EXAMPLETO GET STARTED. <br> Please see a counselor for specific course information for your transfer college or university. 

AREA OF CONCENTRATION:
PHYSICAL EDUCATION
College Requirements
I. General Education Requirements ..... 31
A. Communications $\boldsymbol{V}$ ..... 9
COM 100 Fund. of Speech Communication .....  .3
ENG 101 First-Year Composition I ..... 3
ENG 102 First-Year Composition II .....
B. Social and Behavioral Sciences ..... 6
PSY 100 Introduction to Psychology ..... 3
C. Physical and Life Sciences ..... 7
BIO 120 Principles of Biology .....  .4
D. Mathematics $\boldsymbol{V}$ ..... 3
E. Humanities and Fine Arts ..... 6
II. Additional College Requirements ..... 6-8
A. Physical \& Life Sciences ..... 3-4
BIO 200 Nutrition ..... 3
B. Mathematics ..... 3-4
C. Non-Western and Diversity

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III. Area of Concentration/ElectiveRequirements21-23
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Recommendations include:
EDU 200 Introduction to Education .....  3
EDU 210 Educational Psychology .....  3
HED 100 Personal Wellness .....  3
PED 200 Introduction to Physical Education .....  3
BIO 260 Human Structure and Function .....  4
and
BIO 262 Neuro-musculoskeletal Systems .....  3
or
BIO 270 Anatomy and Physiology I .....  3
and
BIO 272 Anatomy and Physiology II .....  3
$\checkmark$ Assessment required.

NOTE: Because of teacher licensure requirements, transfer school requirements and WCC graduation requirements, students should meet with a counselor as soon as they declare education their intended major. Please note:

- Students must successfully complete the TAP, ACT Plus Writing or SAT before being admitted into most schools of education in Illinois. For updated information, please meet with a counselor or visit www.isbe.net/licensure/html/testing.htm.
- The Illinois State Board of Education will accept a minimum ACT Plus Writing composite score of 22 and combined English/Writing score of 19 or SAT (critical reading + mathematics=1030 and a score of 450 on writing) in lieu of the TAP. For updated information please visit www.isbe.net/ licensure/html/testing.htm.
- Effective July 1, 2015, all test of basic skills, including applicable ACT Plus Writing and SAT scores are valid indefinitely.

This is ONLY an EXAMPLE. Transfer students should check early with their transfer school and Counseling to ensure they are meeting ALL requirements. Transfer schools may vary in their requirements.

# Area of Concentration: Physics THIS IS AN EXAMPLETO GET STARTED. Please see a counselor for specific course information for your transfer college or university. 

AREA OF CONCENTRATION:PHYSICS
College Requirements
I. General Education Requirements ..... 31
A. Communications $\boldsymbol{V}$ ..... 9
COM 100 Fund. of Speech Communication .....  3
ENG 101 First-Year Composition I ..... 3
ENG 102 First-Year Composition II. .....  3
B. Social and Behavioral Sciences ..... 6
C. Physical and Life Sciences ..... 7
PHY 221 General Physics I ..... 5
D. Mathematics $\boldsymbol{V}$ ..... 3
MTH 131 Calculus/Analytic Geometry I .....  4
E. Humanities and Fine Arts ..... 6
II. Additional College Requirements ..... 6-8
A. Physical \& Life Sciences ..... 3-4
CHM 121 General Chemistry ..... 4
B. Mathematics ..... 3-4
MTH 132 Calculus/Analytic Geometry II .....  4
C. Non-Western and DiversityIII. Area of Concentration/ElectiveRequirements21-23
Recommendations include:
CHM 122 Chemistry and Qualitative Analysis .....  4
MTH 233 Calculus/Analytic Geometry III .....  4
MTH 240 Differential Equations .....  3
or
MTH 236 Introduction to Linear Algebra .....  4
PHY 222 General Physics II .....  5
PHY 223 General Physics III ..... 4
$\checkmark$ Assessment required.

* Students are encouraged to take one additional social and behavioral science and one additional humanities and fine arts course within the elective area to meet general education requirements at transfer institutions.

This is ONLY an EXAMPLE. Transfer students should check early with their transfer school and Counseling to ensure they are meeting ALL requirements. Transfer schools may vary in their requirements.

# Area of Concentration: Political Science THIS IS AN EXAMPLE TO GET STARTED. <br> <br> Please see a counselor for specific course <br> <br> Please see a counselor for specific course information for your transfer college or university. 

AREA OF CONCENTRATION:
POLITICAL SCIENCE
College Requirements
I. General Education Requirements ..... 37
A. Communications $\boldsymbol{V}$ ..... 9
COM 100 Fund. of Speech Communication .....  3
ENG 101 First-Year Composition I ..... 3
ENG 102 First-Year Composition II. ..... 3
B. Social and Behavioral Sciences ..... 9
PSC 100 Introduction to American Government .....  3
C. Physical and Life Sciences ..... 7
D. Mathematics ..... 3
MTH 101 College Mathematics ..... or
MTH 102 Applied Practical Mathematics or
MTH 107 Basic Statistics. .....  3
E. Humanities and Fine Arts ..... 9
II. Additional College Requirements ..... 2-3
A. Social Awareness/Personal Growth ..... 2-3
B. Non-Western and Diversity
III. Area of Concentration/ElectiveRequirements*20-21
Recommendations include:
PSC 220 Comparative Government .....  3
PSC 240 State and Local Government .....  3
PSC 260 Introduction to International Relations .....  3
PSC 280 Introduction to Political Philosophy ..... 3
$\checkmark$ Assessment required.* Transfer school may require a second language.
This is ONLY an EXAMPLE. Transfer students should checkearly with their transfer school and Counseling to ensurethey are meeting ALL requirements. Transfer schools mayvary in their requirements.

# Area of Concentration: Psychology THIS IS AN EXAMPLE TO GET STARTED. Please see a counselor for specific course information for your transfer college or university. 

AREA OF CONCENTRATION:PSYCHOLOGY
College Requirements
I. General Education Requirements ..... 37
A. Communications $\boldsymbol{V}$ ..... 9
COM 100 Fund. of Speech Communication .....  3
ENG 101 First-Year Composition I ..... 3
ENG 102 First-Year Composition II ..... 3
B. Social and Behavioral Sciences ..... 9
PSY 100 Introduction to Psychology .....  3
C. Physical and Life Sciences ..... 7
D. Mathematics $\boldsymbol{V}$ ..... 3
MTH 107 Basic Statistics*
E. Humanities and Fine Arts ..... 9
II. Additional College Requirements ..... 2-3
A. Social Awareness/Personal Growth ..... 2-3
B. Physical \& Life Sciences/Mathematics $\boldsymbol{V}$.. no add. hrsC. Non-Western and Diversity
III. Area of Concentration/ElectiveRequirements**20-21
$\checkmark$ Assessment required.* Students planning to attend Illinois State University shouldtake MTH 210 or MTH 211 (both have a math prereq of MTH111).
** Transfer school may require a second language.

This is ONLY an EXAMPLE. Transfer students should check early with their transfer school and Counseling to ensure they are meeting ALL requirements. Transfer schools may vary in their requirements.

# Area of Concentration: Secondary Education THIS IS AN EXAMPLETO GET STARTED. <br> Please see a counselor for specific course information for your transfer college or university. 

AREA OF CONCENTRATION:SECONDARY EDUCATION
College Requirements
I. General Education Requirements ..... 31
A. Communications $\boldsymbol{V}$ ..... 9
COM 100 Fund. of Speech Communication ..... 3
ENG 101 First-Year Composition I ..... 3
ENG 102 First-Year Composition II. .....  .3
B. Social and Behavioral Sciences ..... 6
C. Physical and Life Sciences** ..... 7
D. Mathematics ..... 3
E. Humanities and Fine Arts ..... 6
II. Additional College Requirements ..... 6-8
A. Physical \& Life Sciences ..... 3-4
B. Mathematics ..... 3-4
C. Non-Western and Diversity
III. Area of Concentration/Elective Requirements* ..... 21-23
Recommendations include:
EDU 200 Introduction to Education .....  3
EDU 202 Clinical Experience in Education .....  3
$\checkmark$ Assessment required.

* Secondary education students should choose electives in the subject they plan to teach. Please refer to the sample page of the subject to be taught.
\%* Science and math requirements vary per institution. Please consult with Counseling for specific math and science requirements.

NOTE: Because of teacher licensure requirements, transfer school requirements and WCC graduation requirements, students should meet with a counselor as soon as they declare education as their intended major. Note the following:

- Students must successfully complete the TAP, ACT Plus Writing or SAT before being admitted into most schools of education in Illinois. For updated information, please meet with a counselor or visit www.isbe.net/licensure/html/testing.htm.
- The Illinois State Board of Education will accept a minimum ACT Plus Writing composite score of 22 and combined English/Writing score of 19 or SAT (critical reading + mathematics=1030 and a score of 450 on writing) in lieu of the TAP. For updated information please visit www.isbe.net/ licensure/html/testing.htm.
- Effective July 1, 2015, all test of basic skills, including applicable ACT Plus Writing and SAT scores are valid indefinitely.

This is ONLY an EXAMPLE. Transfer students should check early with their transfer school and Counseling to ensure they are meeting ALL requirements. Transfer schools may vary in their requirements.

## Area of Concentration: Social Work THIS IS AN EXAMPLETO GET STARTED. Please see a counselor for specific course information for your transfer college or university.

AREA OF CONCENTRATION: SOCIAL WORK
College Requirements
I. General Education Requirements ..... 37
A. Communications $\boldsymbol{V}$ ..... 9
COM 100 Fund. of Speech Communication .....  3
ENG 101 First-Year Composition I ..... 3
ENG 102 First-Year Composition II ..... 3
B. Social and Behavioral Sciences ..... 9
PSC 100 Introduction to American Government. ..... 3
PSY 100 Introduction to Psychology ..... 3
SOC 100 Introduction to Sociology ..... 3
C. Physical and Life Sciences ..... 7
BIO 102 Human Biology .....  3
D. Mathematics $\boldsymbol{V}$ ..... 3
MTH 101 College MathematicsorMTH 102 Applied Practical Mathematicsor
MTH 107 Basic Statistics .....  3
E. Humanities and Fine Arts ..... 9
II. Additional College Requirements ..... 2-3
A. Social Awareness/Personal Growth ..... 2-3
B. Non-Western and Diversity
III. Area of Concentration/Elective Requirements20-21

Recommendations include: HSV 215 Introduction to Social Work. ... 3
$\checkmark$ Assessment required.

This is ONLY an EXAMPLE. Transfer students should check early with their transfer school and Counseling to ensure they are meeting ALL requirements. Transfer schools may vary in their requirements.

## Area of Concentration: Sociology THIS IS AN EXAMPLE TO GET STARTED. Please see a counselor for specific course information for your transfer college or university.

area of concentration: SOCIOLOGY
College Requirements
I. General Education Requirements ..... 37
A. Communications $\boldsymbol{V}$ ..... 9
COM 100 Fund. of Speech Communication. .....  3
ENG 101 First-Year Composition I ..... 3
ENG 102 First-Year Composition II ..... 3
B. Social and Behavioral Sciences. ..... 9
SOC 100 Introduction to Sociology ..... 3
C. Physical and Life Sciences ..... 7
D. Mathematics $\boldsymbol{V}$ ..... 3
MTH 101 College Mathematics
or
MTH 102 Applied Practical Mathematics or
MTH 107 Basic Statistics .....  .3
E. Humanities and Fine Arts ..... 9
II. Additional College Requirements ..... 2-3
A. Social Awareness/Personal Growth ..... 2-3
B. Non-Western and Diversity
III. Area of Concentration/ElectiveRequirements*20-21
............................................ Recommendations include:
PSY 235 Social Psychology .....  3
SOC 120 Racial and Ethnic Relations .....  3
SOC 130 Sociology of Family .....  3
SOC 210 Social Problems .....  3
SOC 230 Sociology of Sex and Gender. .....  3
SOC 240 Sociology of Deviance .....  3
Assessment required.* Transfer school may require a second language.This is ONLY an EXAMPLE. Transfer students should checkearly with their transfer school and Counseling to ensurethey are meeting ALL requirements. Transfer schools mayvary in their requirements.

# Area of Concentration: Special Education THIS IS AN EXAMPLE TO GET STARTED. <br> Please see a counselor for specific course information for your transfer college or university. 

AREA OF CONCENTRATION
SPECIAL EDUCATION
College Requirements
I. General Education Requirements ..... 31
A. Communications $\boldsymbol{V}$ ..... 9
COM 100 Fund. of Speech Communication .....  3
ENG 101 First-Year Composition I. ..... 3
ENG 102 First-Year Composition II. .....  3
B. Social and Behavioral Sciences ..... 6
HIS 121 American History to 1865 or
HIS 122 American History Since 1865 ..... 3
PSC 100 Introduction to American Government. ..... 3
C. Physical and Life Sciences ..... 7
D. Mathematics ..... 3
MTH 202 Math for Elementary Teachers II ..... 3
E. Humanities and Fine Arts ..... 6
II. Additional College Requirements ..... 6-8
A. Physical \& Life Sciences ..... 3-4
B. Mathematics ..... 3-4
MTH 201 Math for Elementary Teachers I. .....  3
C. Non-Western and Diversity

## III. Area of Concentration/Elective

 Requirements 21-23Recommendations include:
EDU 200 Introduction to Education ............................ 3
EDU 202 Clinical Experience in Education ................. 3
EDU 205 Introduction to Technology in Education .... 3
EDU 210 Educational Psychology ............................... 3
EDU 220 Introduction to Special Education ............... 3
PSY 100 Introduction to Psychology .......................... 3
$\checkmark$ Assessment required.
NOTE: Because of teacher licensure requirements, transfer school requirements and WCC graduation requirements, students should meet with a counselor as soon as they declare education as their intended major. Note the following:

- Students must successfully complete the TAP, ACT Plus Writing or SAT before being admitted into most schools of education in Illinois. For updated information, please meet with a counselor or visit www.isbe.net/licensure/html/testing.htm.
- The Illinois State Board of Education will accept a minimum ACT Plus Writing composite score of 22 and combined English/Writing score of 19 or SAT (critical reading + mathematics=1030 and a score of 450 on writing) in lieu of the TAP. For updated information please visit www.isbe.net/ licensure/html/testing.htm.
- Effective July 1, 2015, all test of basic skills, including applicable ACT Plus Writing and SAT scores are valid indefinitely.
- Some transfer institutions require documentation of previous work with special populations.

This is ONLY an EXAMPLE. Transfer students should check early with their transfer school and Counseling to ensure they are meeting ALL requirements. Transfer schools may vary in their requirements.

## Area of Concentration: Sport Management THIS IS AN EXAMPLETO GET STARTED. <br> Please see a counselor for specific course information for your transfer college or university.

## AREA OF CONCENTRATION: <br> SPORT MANAGEMENT

## College Requirements

I. General Education Requirements ........................ 37
A. Communications V ..................................................... 9

COM 100 Fund. of Speech Communication................ 3
ENG 101 First-Year Composition I............................... 3
ENG 102 First-Year Composition II.............................. 3
B. Social and Behavioral Sciences................................... 9

ECN 201 Principles of Economics-Microeconomics........................ 3
ECN 202 Principles of Economics-Macroeconomics....................... 3
PSY 100 Introduction to Psychology .......................... 3
C. Physical and Life Sciences .......................................... 7
D. Mathematics V .............................................................. 3
E. Humanities and Fine Arts ............................................ 9
II. Additional College Requirements .......................2-3
A. Social Awareness/Personal Growth ....................... 2-3

HED 100 Personal Wellness......................................... 3
B. Non-Western and Diversity
III. Area of Concentration/ElectiveRequirements20-21
Recommendations include:
BUS 100 Introduction to Business .....  3
PED 203 Current Issues in Sports .....  3
PED 235 Survey of Sports Organization .....  3
$\checkmark$ Assessment required.
This is ONLY an EXAMPLE. Transfer students should check early with their transfer school and Counseling to ensure they are meeting ALL requirements. Transfer schools may vary in their requirements.

## WAUBONSEE <br> the value of variety

## General

 Studies Program
## General Studies Program

Waubonsee offers an Associate in General Studies degree and a General Studies Certificate of Achievement.

## Degree Requirements

## Associate in General Studies (AGS) (GS10) major code

The Associate in General Studies degree is designed primarily for students who have chosen to pursue a broad general program rather than a specific occupational-oriented or baccalaureateoriented program.

## I. College Requirements

A. Semester Hours

A total of 60 semester hours or more completed as specified in the following sections.

## B. Grade-Points

A minimum cumulative grade point average of 2.0
(C average) in all coursework taken, regular student status, and in good standing.

## C. Academic Residency

Meet the college's academic residency requirement: a minimum of 15 semester hours in courses must have been achieved at Waubonsee, excluding credit by proficiency.

## II. General Education Requirements

## Associate in General Studies

(AGS) ........................................................................ 21 sem hrs
(Courses are 3 sem hrs unless indicated.)
A. Communications. $\qquad$ 9 sem hrs
Communications: Any 100-level COM course
English: Any 100-level ENG course
B. Social and

Behavioral Sciences............................................. 6 sem hrs
Anthropology: ANT 101, 102, 110, 120
Economics: ECN 100, 201, 202
Geography: GEO 120, 220, 235
History: HIS 101, 102, 121, 122, 205, 215, 220, 225, 235, 245, 290
Political Science: PSC 100, 220, 240, 260, 280
Psychology: PSY 100, 200, 205, 215, 220, 226, 235, 240, 245, 250
Sociology: SOC 100, 120, 130, 210, 230, 240

D. Humanities and Fine Arts. $\qquad$ 3 sem hrs
Art: ART 100, 101, 102, 103, 104, 105, 106, 110, 111, 112, 120, 121, 130, 131, 135, 140, 142, 155, 222, 230, 231, 240, 241, 242, 243, 255, 260, 261, 262, 265, 290, 293
Chinese: CHN 101, 102
English: ENG 204, 205, 206, 211, 212, 215, 220, 221, 222, $225,226,227,228,229,230,235,240,245,255,260$, 265
Film Studies: FLM 250, 260, 270
French: FRE 101, 102, 201, 202
German: GER 101, 102, 201, 202
History: HIS 111, 112, 125
Humanities: HUM 101, 102, 201
Japanese: JPN 101, 102
Music: MUS 100, 101, 102, 110 (2), 120, 121 (4), 123,
124 (1), 150 (2), 151 (2), 154 (2), 160 (1), 161 (1), 162 (1), 164 (1), 166 (1), 167 (1), 168 (1), 170 (1), 171 (1), 175 (1.5), 176 (1.5), 180 (1), 181 (1), 182 (1), 183 (1), 184 (1), 185 (1), 186 (1), 187 (1), 188 (1), 200, 210 (4), 211, 213, 215, 221, 222 (1), 223, 224 (1), 251 (2), 252 (2), 254 (2), 266 (1), 280 (2), 281 (2), 282 (2), 283 (2), 284 (2), 285 (2), 286 (2), 287 (2), 288 (2)
Philosophy: PHL 100, 101, 105, 107, 110, 120, 140, 201, 202
Religious Studies: RLG 120, 220, 230, 240
Sign Language: SGN 101, 102
Spanish: SPN 101, 102, 103, 110, 111, 201, 202, 205, 211, 215
Theatre: THE 100, 110, 130, 201
III. Elective Requirements. $\qquad$ 39 sem hrs
Choose electives numbered 100-299 from any discipline.

## General Studies

## Certificate Requirements

## (GS20) major code

This certificate signifies the completion of one year of college and is awarded to students who apply for the certificate and meet the following requirements:

- complete at least 30 semester hours of credit courses numbered 100-299.
- achieve a minimum cumulative grade point average of 2.0 (C average) in all courses applied toward certificate completion.
- complete at least 15 semester hours of credit at Waubonsee.

Certificates are awarded at the end of the semester the coursework is completed or the semester the application is submitted if the coursework was previously completed.

## WAUBONSEE <br> yourself in a job you enjoy

# Career and Technical Education 

## Purpose of the Career and Technical Education Curriculum

Career and technical education programs are designed for students seeking specialized training in preparation for employment after leaving Waubonsee Community College. Both the Associate in Applied Science degree (AAS - two-year program) and certificates (usually one year or less) are offered in many technical areas. Although these programs are not primarily designed to transfer to four-year colleges and universities, Waubonsee has established articulation agreements with a number of colleges and universities, and many of the Associate in Applied Science degrees may transfer. See Counseling for more details.

## Occupational Program Guarantee

Waubonsee Community College, as an expression of confidence in its faculty, staff and educational programs, guarantees the skills of all career/occupational AAS degree and certificate graduates subject to the following conditions:

1. All coursework for the degree or certificate must have been completed at Waubonsee Community College.
2. The student must have graduated within four years of initial enrollment.
3. The student must be employed in a job directly related to his/ her program of study within two years after graduation from a Waubonsee Community College Associate in Applied Science degree or certificate program.
4. The employer must verify in writing, within 90 days of the graduate's initial employment, that the graduate lacks competency in specific technical skills as represented by the degree information printed in the college catalog.
5. The retraining is limited to courses regularly offered by the college.
6. A written retraining plan must be developed by the employer, the graduate and the appropriate instructional administrator specifying the courses needed for retraining and the competencies to be mastered.
7. Prerequisites and other admission requirements for retraining courses must be met and are not included in the courses covered by this guarantee.
8. A maximum of 15 credit hours of career/occupational coursework is provided free of tuition under the terms of this guarantee. Lab fees and other course costs are not included.
9. All retraining must be completed within two calendar years after the claim is filed.

For further information concerning the Career/Occupational Program Guarantee, contact the Vice President of Educational Affairs (see directory).

Waubonsee's occupational programs support student participation in SkillsUSA activities.

See an advisor or instructor for details.


Career and
Technical Education

## Degree Requirements

## Associate in Applied Science (AAS)

The college recommends that all students create an educational plan with a counselor. Courses numbered 100-299 may be counted toward this degree.

## I. College Requirements

## A. Semester Hours

A total of 60 semester hours or more completed as specified in the following sections.
B. Grade-Points

A minimum cumulative grade point average of 2.0
(C average) in all coursework taken, regular student status and in good standing. An " $m$ " denotes courses in which a minimum grade of $C$ must be achieved.

## C. Academic Residency

Meet the college's academic residency requirement: a minimum of 15 semester hours in courses must have been achieved at Waubonsee, excluding prior learning by assessment.

## II. General Education Requirements

 Associate in Applied Science AAS $\qquad$ 15 sem hrs(Courses are 3 sem hrs unless indicated.)
A. Communications. $\qquad$ 6 sem hrs Unless particular courses are specified in the curriculum, choose two of these courses:
English: ENG 101, 102, 152, 153
B. Social and Behavioral

Sciences 3 sem hrs
Unless a particular course is specified in the curriculum,
choose a course from below.
Anthropology: ANT 100, 101, 102
Economics: ECN 100, 201, 202
Geography: GEO 120, 220, 235
History: HIS 101, 102, 121, 122, 205, 215, 220, 225, 235, 245, 290
Political Science: PSC 100, 220, 240, 260, 280
Psychology: PSY 100, 200, 205, 215, 220, 226, 235, 240, 245, 250
Sociology: SOC 100, 120, 130, 210, 230, 240

## C. Mathematics or

Physical and Life Sciences $\qquad$ 3 sem hrs
Unless a particular course is specified in the curriculum, choose a course or courses from below.
Astronomy: AST 100, 105 (4)
Biology: BIO 100, 101 (1), 102, 103 (1), 110, 111 (1), 122 (4), 126 (4), 200, 250 (4), 260 (4), 262, 264, 270 (4), 272 (4)
Chemistry: CHM 100, 101 (1), 102, 103 (1), 121 (4), 122 (4), 202, 231 (4), 232 (4)
Earth Science: ESC 100, 101 (1), 110, 120 (4), 130
Geography: GEO 121 (4), 130, 131, 132, 140, 200, 210
Geology: GLG 100, 101 (1), 102 (4), 103,120
Mathematics: MTH 101, 102, 103, 104, 107, 109, 129, 130, 131 (4), 132 (4), 201, 202, 210, 211 (4), 233 (4), 236, 240
Physics: PHY 103, 104 (1), 111 (4), 112 (4), 221 (5), 222 (5), 223 (4)
D. Humanities and Fine Arts. 3 sem hrs
Unless a particular course is specified in the curriculum, choose a course or courses from below.
Art: ART 100, 101, 102, 103, 104, 105, 106, 110, 111, 112, $120,121,130,131,135,140,142,155,222,230,231$, 240, 241, 242, 243, 255, 260, 261, 262, 265, 290, 293
Chinese: CHN 101, 102
Communications: COM 100, 110, 115, 120, 121, 122, 135, 150, 200, 201
English: ENG 204, 205, 206, 211, 212, 215, 220, 221, 222, $225,226,227,228,229,230,235,240,245,255,260$, 265
Film Studies: FLM 250, 260, 270
French: FRE 101, 102, 201, 202
German: GER 101, 102, 201, 202
History: HIS 111, 112, 125
Humanities: HUM 101, 102, 201
Japanese: JPN 101, 102
Music: MUS 100, 101, 102, 110 (2), 120, 121 (4), 123, 124
(1), 150 (2) , 151 (2), 154 (2), 160 (1), 161 (1), 162 (1), 164
(1), 166 (1), 167 (1), 168 (1), 170 (1), 171 (1), 175 (1.5), 176 (1.5), 180 (1), 181 (1), 182 (1), 183 (1), 184 (1), 185 (1), 186 (1), 187 (1), 188 (1), 200, 210, 211, 213, 215, 221, 222 (1), 223, 224 (1), 251 (2), 252 (2), 254 (2), 266 (1), $280(2)$, 281 (2), 282 (2), 283 (2), 284 (2), 285 (2), 286 (2), 287 (2), 288 (2)
Philosophy: PHL 100, 101, 105, 110, 120, 140, 201, 202
Religious Studies: RLG 120, 220, 230, 240
Sign Language: SGN 101, 102
Spanish: SPN 101, 102, 103, 110, 111, 201, 202, 205, 211, 215
Theatre:THE 100, 110, 130, 201, 202, 205, 210, 220

## III. Major Field and Elective Requirements.... 45-57

Students must satisfactorily complete all courses specified in the curriculum of their choice. See the individual career/ occupational degree and certificate sections and the course descriptions for details.

## Certificate of Achievement Requirements

Occupational certificate programs are developed and offered in areas where job-entry training and educational requirements often can be met in less than two years.

To be awarded a Certificate of Achievement, students must complete the following general requirements:

- complete one of the prescribed certificate curricula;
- achieve a minimum cumulative grade point average of 2.0 (C average) in all courses required for certificate. An "m" denotes major courses in which a minimum grade of $C$ must be achieved.
- complete at least one-half of all credit hours at Waubonsee.

Certificates are awarded at the end of the semester the coursework is completed or the semester the application is submitted if the coursework was previously completed. Application for Certificate forms can be found at mywcc, on the student tab in the Student Success box; or students may contact their counselor or the Credentials Analyst.

## Career and Technical Education Program Descriptions

Each career and technical education program offered at the college is described in the following sections.

Although most Associate in Applied Science (AAS) degrees can be accomplished in two years of full-time study, some may require additional time because of class scheduling criteria or because of required practicums or additional coursework. Students should work closely with their counselors to anticipate required coursework in each individual program they start.

The list below shows all Associate in Applied Science (AAS) degrees and Certificates of Achievement offered at Waubonsee Community College. For AAS degree and certificate programs offered in cooperation with other community colleges, see "Cooperative Agreement" in the Tuition and Fees section of this catalog.
Accounting ..... 77
Accounting AAS
Accounting Certificate Payroll and Tax Accounting Certificate CPA Preparation Post-Baccalaureate Certificate CMA Preparation Post-Baccalaureate Certificate
Apprentice Training Program. ..... 80
Construction Electrician AASConstruction Technology Professional AAS
Auto Body Repair. ..... 81
Auto Body Repair AAS
Advanced Auto Body Repair Certificate
Basic Auto Body Repair Certificate
Automation Technology ..... 83
Automation Technology AAS
Automation Technology Certificate
Supply Chain Technician CertificateBasic Mechatronics Technology Certificate
Automotive Technology. ..... 85
Automotive Technology AAS
Automotive Transportation Service Technology AASAutomotive Brake and Suspension CertificateAutomotive Electrical/Electronics CertificateAutomotive Maintenance CertificateAutomotive Transmission and Driveline CertificateEngine Performance CertificateAutomotive Recycling CertificateLight Duty Diesel Repair Certificate
Business Administration. ..... 89
Business Administration AAS
Administrative Assistant CertificateManagement Certificate
Computer Aided Design and Drafting. ..... 91
Computer Aided Design and Drafting AAS
Computer Aided Drafting Certificate
Advanced Computer Aided
Design and Drafting Certificate
Computer Information Systems ..... 93
Computer Software Development AAS
Computer Software Development Certificate
Computer Support Certificate
Office Software Specialist Certificate
Construction Management. ..... 96
Construction Management AAS
Construction Management Certificate
Criminal Justice ..... 98
Criminal Justice AAS
Early Childhood Education. ..... 100
Early Childhood Education AAS
Child Care Worker CertificateEarly Childhood Education Level 2 CertificateInfant and Toddler Level 2 CertificateSchool-Age Level 2 Certificate
Emergency Medical Technician ..... 104
Emergency Medical Technician-Paramedic AASEmergency Medical Technician-Basic Certificate
Fire Science. ..... 106
Fire Science Technology AAS
Firefighter Certificate
Fire Officer I Certificate
Geographic Information Systems. ..... 108
Geographic Information Systems AAS
Geographic Information Systems CertificateAdvanced Geographic Information Systems Certificate
Graphic Design ..... 110
Graphic Design AAS
Graphic Design Certificate
Animation Certificate
Web Design Certificate
Health Care Interpreting ..... 113
Medical Interpreter Certificate
Health Information Technology. ..... 114
Health Information Technology AAS
Medical Office CertificateHealth Care Coding Certificate
Heating, Ventilation and Air Conditioning ..... 116Heating, Ventilation and Air Conditioning AASHeating, Ventilation and Air Conditioning Certificate
Human Services. ..... 118
Human Services AAS
Addictions Counseling Certificate
Alcohol and Drug Counselor
Interpreter Training/Sign Language ..... 121Interpreter Training AAS
Kinesiology ..... 123
Kinesiology AASKinesiology Certificate
Laboratory Technology ..... 125
Laboratory Technology AASBasic Laboratory Technology Certificate
Legal Interpreting ..... 127
Legal Interpreting: English/Spanish Certificate
Machine Tool Technology. ..... 128
Advanced Manufacturing Technology AAS
CNC Operator Certificate
CNC Programmer Certificate
Management -Human Resources. ..... 130
Human Resources Management AAS
Mass Communication ..... 131
Mass Communication AASMass Communication Certificate
Medical Assistant. ..... 133Medical Assistant Certificate
Music. ..... 135Audio Production Technology Certificate
Nurse Assistant. ..... 136
Basic Nurse Assistant Training Certificate
Paraprofessional Educator ..... 138Paraprofessional Educator AASParaprofessional Educator Certificate
Phlebotomy Technician ..... 140Phlebotomy Technician Certificate
Photography ..... 141Basic Digital Photography CertificateComprehensive Photography Certificate
Real Estate ..... 142
Real Estate Broker CertificateReal Estate Managing Broker Certificate
Registered Nursing. ..... 144Nursing AAS
Surgical Technology ..... 147
Surgical Technology Certificate ..... 149
Therapeutic Massage
Therapeutic Massage Certificate
Welding Technology151Welding Technology AASWelding Technology CertificateAdvanced Welding Certificate
World Wide Web. ..... 153
Website Development AASWeb Authoring CertificateNote: General career information found in the following section is based on theU.S. Bureau of Labor Statistics Occupational Outlook Handbook.

## WAUBONSEE <br> skills employers want

# Career and Technical Education Degrees and Certificates 

# Accounting 

## Accounting

## Associate in Applied Science Degree (010A) major code

The Accounting Program provides students with fundamental skills in financial record keeping, report analysis and core business principles. This program exposes students to public, industrial, private and governmental agencies.
General Education Requirements ..... 15
COM 100 or 121 Communications ..... 3
ENG 101 or 152 English ..... 3
ENG 102 or 153 English ..... 3
Mathematics elective• ..... 3
Economics elective• ..... 3
Accounting Major Program Requirements ..... 24
ACC 125 Accounting Information Systems ..... 3
ACC 130 Payroll Accounting ..... 3
ACC 202* Financial Accounting. ..... 3
ACC 203 Managerial Accounting ..... 3
ACC 215 Individual Tax Accounting. ..... 3
ACC 220 Intermediate Accounting ..... 3
ACC 221 Intermediate Accounting II ..... 3
ACC 240 Cost Accounting ..... 3
Additional Program Requirements ..... 15
BUS 100 Introduction to Business ..... 3
BUS 210 or 211 Business Law. ..... 3
CIS 110 Business Information Systems ..... 3
CIS 112 Comprehensive Excel Spreadsheet ..... 3
MGT 200 Principles of Management ..... 3
Electives ..... 6Select electives from: Accounting (ACC), Business Administration (BUS),Computer Information Systems (CIS), Construction Management (CMT),Economics (ECN), Finance (FIN), Management (MGT), Marketing (MKT), RealEstate (REL), World Wide Web (WEB)
PROGRAMTOTAL60

* Students with a grade point average below a 3.0 should consider taking ACC 101Introduction to Accounting or MTH 104 Business Math before taking ACC 202.Students who choose ACC 101 may apply it as an elective in this program. CPAstudents must take COM 121 instead of COM 100.
- See course choices listed on pages 72-73.


## JobTitles

- Accountant
- Accounting Associate
- Auditor
- Billing Associate
- Bookkeeper
- Payroll Associate
- Tax Preparer


## About the Occupation

Accountants generally work in one of four major areas. Public accountants are employed primarily in auditing, taxation or consulting businesses. Management accountants provide financial guidance and planning for a company. Government accountants maintain and examine the records of government agencies and audit private businesses that are subject to government regulations. Internal auditors review their company's operations.

## Highlights of Waubonsee's Program

- Students can earn college credit and gain hands-on experience preparing taxes for low to moderate-income families in the Volunteer Income Tax Assistance (VITA) program. Waubonsee has participated since 2005.
- Waubonsee Community College is accredited by Alpha Beta Gamma International Business Honor Society to initiate members into the honor society for business and related professional disciplines. For additional information visit www.abg.org.


## Professional

Certification Opportunities:

- Certified Public Accountant (CPA)-To sit for the CPA examination in Illinois, the candidate must have 150 hours of acceptable college level education, including at least a bachelor's degree. For additional information visit www.ilboa.org. 30 hours must be in accounting (see page 78); an additional 24 hours in business courses are required.
- Certified Management Accountant (CMA) - The CMA is a national program with no state affiliates. The candidate must have a baccalaureate degree in any field and have two continuous years of professional experience in the field. For additional information visit www.imanet.org.
- Fundamental Payroll Certification (FPC) - The FPC is open to all those who wish to demonstrate a baseline of payroll competency. The FPC is designed for entry-level payroll professionals and professionals serving the payroll industry.
Certificate of Achievement (013A) major code

Certificate of Achievement
(013A) major codeThis program provides students with fundamental skills infinancial record keeping, report analysis and an opportunity totransition to completion of the AAS in Accounting.
Course Requirements
ACC 125 Accounting Information Systems ..... 3
ACC 202 Financial Accounting. ..... 3
ACC 203 Managerial Accounting ..... 3
ACC 215 Individual Tax Accounting or
ACC 235 Taxation of

Limited Liability Companies (LLCs).

Limited Liability Companies (LLCs).

Limited Liability Companies (LLCs).

Limited Liability Companies (LLCs).

Limited Liability Companies (LLCs).

Limited Liability Companies (LLCs). .....  .....  .....  .....  .....  3 .....  .....  .....  .....  .....  3 .....  .....  .....  .....  .....  3 .....  .....  .....  .....  .....  3 .....  .....  .....  .....  .....  3 .....  .....  .....  .....  .....  3

ACC 220 Intermediate Accounting I

ACC 220 Intermediate Accounting I

ACC 220 Intermediate Accounting I

ACC 220 Intermediate Accounting I

ACC 220 Intermediate Accounting I .....  .....  .....  ..... 3 .....  .....  .....  ..... 3 .....  .....  .....  ..... 3 .....  .....  .....  ..... 3 .....  .....  .....  ..... 3

ACC 221 Intermediate Accounting II.

ACC 221 Intermediate Accounting II.

ACC 221 Intermediate Accounting II.

ACC 221 Intermediate Accounting II.

ACC 221 Intermediate Accounting II. .....  .....  ..... 3 .....  .....  ..... 3 .....  .....  ..... 3 .....  .....  ..... 3 .....  .....  ..... 3

ACC 240 Cost Accounting

ACC 240 Cost Accounting

ACC 240 Cost Accounting

ACC 240 Cost Accounting

ACC 240 Cost Accounting .....  ..... 3 .....  ..... 3 .....  ..... 3 .....  ..... 3 .....  ..... 3
BUS 210 or 211 Business Law.
BUS 210 or 211 Business Law.
BUS 210 or 211 Business Law.
BUS 210 or 211 Business Law.
BUS 210 or 211 Business Law. ..... 3 ..... 3 ..... 3 ..... 3 ..... 3
CIS 112 Comprehensive Excel Spreadsheet
CIS 112 Comprehensive Excel Spreadsheet
CIS 112 Comprehensive Excel Spreadsheet
CIS 112 Comprehensive Excel Spreadsheet
CIS 112 Comprehensive Excel Spreadsheet ..... 3 ..... 3 ..... 3 ..... 3 ..... 3
PROGRAM TOTAL ..... 27
Payroll and Tax Accounting
Certificate of Achievement(015B) major codeThis certificate prepares the student for entry-level jobs as apayroll clerk and general accounting clerk. Students will also beprepared for the Fundamental Payroll Certification Test (FPC)offered by the American Payroll Association.

Course Requirements

Course Requirements

Course Requirements

Course Requirements

Course Requirements

Course Requirements

Course Requirements

ACC 101 Introduction to Accounting

ACC 101 Introduction to Accounting

ACC 101 Introduction to Accounting

ACC 101 Introduction to Accounting

ACC 101 Introduction to Accounting

ACC 101 Introduction to Accounting

ACC 101 Introduction to Accounting .....  ..... 3 .....  ..... 3 .....  ..... 3 .....  ..... 3 .....  ..... 3 .....  ..... 3 .....  ..... 3
ACC 125 Accounting Information Systems
ACC 125 Accounting Information Systems
ACC 125 Accounting Information Systems
ACC 125 Accounting Information Systems
ACC 125 Accounting Information Systems
ACC 125 Accounting Information Systems
ACC 125 Accounting Information Systems ..... 3 ..... 3 ..... 3 ..... 3 ..... 3 ..... 3 ..... 3
ACC 130 Payroll Accounting
ACC 130 Payroll Accounting
ACC 130 Payroll Accounting
ACC 130 Payroll Accounting
ACC 130 Payroll Accounting
ACC 130 Payroll Accounting
ACC 130 Payroll Accounting ..... 3 ..... 3 ..... 3 ..... 3 ..... 3 ..... 3 ..... 3
ACC 215 Individual Tax Accounting.
ACC 215 Individual Tax Accounting.
ACC 215 Individual Tax Accounting.
ACC 215 Individual Tax Accounting.
ACC 215 Individual Tax Accounting.
ACC 215 Individual Tax Accounting.
ACC 215 Individual Tax Accounting. ..... 3 ..... 3 ..... 3 ..... 3 ..... 3 ..... 3 ..... 3
CIS 110 Business Information Systems
CIS 110 Business Information Systems
CIS 110 Business Information Systems
CIS 110 Business Information Systems
CIS 110 Business Information Systems
CIS 110 Business Information Systems
CIS 110 Business Information Systems ..... 3 ..... 3 ..... 3 ..... 3 ..... 3 ..... 3 ..... 3
CIS 112 Comprehensive Excel Spreadsheet
CIS 112 Comprehensive Excel Spreadsheet
CIS 112 Comprehensive Excel Spreadsheet
CIS 112 Comprehensive Excel Spreadsheet
CIS 112 Comprehensive Excel Spreadsheet
CIS 112 Comprehensive Excel Spreadsheet
CIS 112 Comprehensive Excel Spreadsheet ..... 3 ..... 3 ..... 3 ..... 3 ..... 3 ..... 3 ..... 3
PROGRAM TOTAL ..... 18

## Accounting

This program provides students with fundamental skills in transition to completion of the AAS in Accounting.

## CPA Preparation

 Post-Baccalaureate
## Certificate of Achievement (017B) major code

This certificate provides the student who has already earned a bachelor's or higher degree from an accredited educational institution the minimum accounting requirements to sit for the Certified Public Accountant (CPA) exam.

To qualify for the CPA exam, the Illinois Board of Examiners requires 150 semester hours of acceptable credit. These hours must include a minimum of 30 semester hours in accounting in addition to 24 semester hours in business courses (other than accounting).

Please visit http://www.illinois-cpa-exam.com for more information.
Course Requirements
ACC 202 Financial Accounting. ..... 3
ACC 203 Managerial Accounting ..... 3
ACC 215 Individual Tax Accounting ..... 3
ACC 220 Intermediate Accounting I ..... 3
ACC 221 Intermediate Accounting II ..... 3
ACC 235 Taxation of Limited Liability Companies (LLCs) ..... 3
ACC 240 Cost Accounting ..... 3
ACC 250 Auditing I ..... 3
ACC 251 Auditing II ..... 3
ACC 252 Accounting Research and Analysis. ..... 2
ACC 260 Advanced Accounting. ..... 3
PROGRAM TOTAL ..... 32

## CMA Preparation <br> Post-Baccalaureate

## Certificate of Achievement

## (018B) major code

This certificate provides the student who has already earned a bachelor's or higher degree from an accredited educational institution the suggested accounting and business requirements to sit for the Certified Management Accountant examination. An additional requirement to qualify for the Certified Management Accountant exam is a minimum of two years full-time (four years part-time) continuous experience in management accounting and/ or financial management.

Please visit http://www.imanet.org for more information.

## Course Requirements

ACC 202 Financial Accounting.......................................... 3
ACC 203 Managerial Accounting...................................... 3
ACC 220 Intermediate Accounting I................................ 3
ACC 221 Intermediate Accounting II............................... 3
ACC 240 Cost Accounting............................................... 3
BUS 207 Business Statistics............................................ 3
BUS 210 Legal Environment of Business........................ 3
ECN 201 Principles of Economics-Microeconomics ...... 3
ECN 202 Principles of Economics-Macroeconomics ..... 3
FIN 200 Principles of Finance ....................................... 3

PROGRAM TOTAL .............................................................. 30

## Apprentice Training Program

## Construction Electrician

Associate in Applied Science A.A.S. Major Code 740B

The purpose of the Construction Electrician Program is to maintain a properly trained workforce in this labor market. Students who graduate from the program could work as electrical contractors, electrical estimators, project superintendents, general foremen, or journeymen electricians within the residential, commercial, industrial or telecommunications fields. The program is a joint effort between Waubonsee Community College and the Joint Apprenticeship and Training Committee (JATC) of Local Union 461 (IBEW).
General Education Requirements ..... 15
COM 100 or 121 Communication. ..... 3
ENG 101 or 152 English ..... 3
ENG 102 or 153 English ..... 3
Mathematics elective - ..... 3
Social and BehavioralScience elective -3
Major Program Requirements ..... 30
ATP110 Electrical Apprentice I ..... 3
ATP111 Electrical Apprentice II ..... 3
ATP112 Electrical Apprentice III ..... 3
ATP113 Electrical Apprentice IV .....  3
ATP114 Electrical Apprentice V ..... 3
ATP210 Electrical Apprentice VI. ..... 3
ATP211 Electrical Apprentice VII ..... 3
ATP212 Electrical Apprentice VIII ..... 3
ATP213 Electrical Apprentice IX ..... 3
ATP214 Electrical Apprentice X ..... 3
Electives ..... 15
Note: Select electives from Internship (ITS) or from any discipline. See Counseling for course guidance. ..... 15
PROGRAMTOTAL ..... 60

- See course choices listed on pages 72-73.


## Construction Technology Professional <br> Associate in Applied Science A.A.S. Major Code 780A

This program is offered exclusively in partnership with the Chicago Regional Council of Carpenters allowing members who successfully complete the four-year apprenticeship training offered by the Council's Apprentice Training Program to earn college credit toward a degree. Through a combination of classroom education and on-the-job learning, apprentices can earn up to 30 semester hours.
General Education Requirements ..... 15
ENG 101 or 152 English ..... 3
ENG 102 or 153 English ..... 3
Humanities and Fine Arts elective - ..... 3
Mathematics and
Physical Science elective ..... 3
Social and Behavioral
Science elective - ..... 3
Note: Select courses from degree requirements.See Counseling for guidance.
Major Program Requirements ..... 30
ATP100 Carpentry Pre-Apprenticeship ..... 15
ATP101 Carpenters Apprenticeship I. ..... 5
ATP102 Carpenters Apprenticeship II ..... 5
ATP103 Carpenters Apprenticeship III. ..... 5
Electives ..... 15
Note: Select electives from any discipline. See Counseling for course guidance. ..... 15
PROGRAM TOTAL ..... 60- See course choices listed on pages 72-73.

# Auto Body Repair 

Auto Body Repair
Associate in Applied Science Degree (700B) major codeThe Auto Body Repair Program provides students hands-on skills in body repair,surface preparation, painting, and frame repair.
General Education Requirements ..... 15
COM 100 or 121 Communication. ..... 3
ENG 101 or 152 English ..... 3
ENG 102 or 153 English ..... 3
Mathematics elective - ..... 3
Social and Behavioral Sciences elective ..... 3
Major Program Requirements -
Fall Semester16
ABR 100 Auto Body Welding ..... 3
ABR 105 Sheet Metal Repair ..... 2
ABR 110 Fiberglass Panel and Plastic Repair ..... 2
ABR 115 Basic Auto Body Repair ..... 4
ABR 120 Auto Painting and Refinishing ..... 4
ABR 125 Auto Body Careers ..... 1
Spring Semester. ..... 16
ABR 130 Automotive Collision Appraisal ..... 1
ABR 135 Frame Repair ..... 6
ABR 140 Glass Service ..... 1
ABR 145 Intermediate Auto Body Repair ..... 6
ABR 150 Chassis and Electrical Systems for Auto Collision ..... 2
Summer Semester ..... 3
ABR 215 Advanced Auto Body Repair ..... 3
Additional Program Requirements ..... 3
3 hours of ABRinternship credit (ABR297, ABR298, ABR299).3
Electives ..... 7Select electives from: Automotive Technology (AUT), Business Administration(BUS), Computer Information Systems (CIS), Electronics Technology (ELT),Machine Tool Technology (MTT), Management (MGT), Marketing (MKT), WeldingTechnology (WLD)
PROGRAMTOTAL60

- See course choices listed on pages 72-73.

NOTE: All students enrolled in the Auto Body Repair Program are required to provide their own hand tools, safety glasses, protective clothing and safety shoes.

## JobTitles

- Automotive Body Painter
- Collision Repair Technician


## About the Occupation

While automotive technology continues to advance, the need will always exist for highly skilled automobile body repair personnel. These individuals repair or replace damaged parts and paint vehicles of all types. The equipment they use ranges from simple hand tools to computerized alignment equipment.
Highlights of Waubonsee's Program

- Waubonsee Community College's auto body repair program is structured around Automotive Service Excellence (ASE) standards.
- Waubonsee Community College's automotive technician program is certified by the National Institute for Automotive Service Excellence (ASE) through the National Automotive Technicians Education Foundation (NATEF).
- Students get real-world experience by working on a wide variety of vehicles.
- Students begin by learning basic repair techniques and advance to use sophisticated computer-controlled equipment.
- Students develop painting skills using conventional solvent-based painting techniques and environmentally friendly water-borne techniques.


## Auto Body Repair Awards

## IL Skills USA

1st place: 2008, 2009, 2010, 2011, 2013, 2014, 2015, 2016
2nd place: 2008, 2009, 2010, 2011, 2012,
2015, 2016
3rd place: 2010, 2012, 2014, 2015

## National Skills USA

1st place: 2013, 2014, 2016
2nd place: 2009
4th place: 2010, 2015
5th place: 2016
8th place: 2011, 2013

## AUTO BODY REPAIR PROGRAM REOUIREMENTS: DEGREE AND CERTIFICATE

- The Auto Body Repair Program is a full-time block program.
- Prior to enrolling, students are required to fill out the New Student Information Form and pass the college's reading assessment test.
- All students in the Auto Body Repair program are required to purchase supplies and equipment by the second week of class. The estimated total cost is between $\$ 325$ and $\$ 460$.
- Students may not have any facial hair that comes into contact with their respirator.


## Basic Auto Body Repair Certificate of Achievement (703B) major code

This certificate provides students with the knowledge and skills for paint preparation and basic body repair, which prepare an individual for entry-level positions within the collision repair industry.

## Course Requirements

ABR 100 Auto Body Welding ..... 3
ABR 105 Sheet Metal Repair ..... 2
ABR 110 Fiberglass Panel and Plastic Repair ..... 2
ABR 115 Basic Auto Body Repair ..... 4
ABR 120 Auto Painting and Refinishing ..... 4
ABR 125 Auto Body Careers ..... 1
PROGRAM TOTAL ..... 16

## Advanced Auto Body Repair

## Certificate of Achievement (705B) major code

This certificate builds on the basic certificate, providing students with knowledge and skills in the areas of frame repair, glass service, chassis repair, electrical system repair and automotive collision repair appraisal. Students who successfully complete this certificate are prepared to take the ASE Auto Body Certification exam and to begin their career as an auto body repair technician.
Course Requirements Fall Semester ..... 16
ABR 100 Auto Body Welding ..... 3
ABR 105 Sheet Metal Repair ..... 2
ABR 110 Fiberglass Panel and Plastic Repair ..... 2
ABR 120 Auto Painting and Refinishing ..... 4
ABR 125 Auto Body Careers ..... 1
Spring Semester ..... 16
ABR 130 Automotive Collision Appraisa .....  1
ABR 135 Frame Repair ..... 6
ABR 140 Glass Service ..... 1
ABR 145 Intermediate Auto Body Repair ..... 6
ABR 150 Chassis and Electrical Systems for Collision Repair ..... 2
Summer Semester ..... 6
ABR 215 Advanced Auto Body Repair ..... 3
3 hours of ABR internship credit(ABR 297, ABR 298, ABR 299)3
PROGRAM TOTAL ..... 38

## Automation Technology

# Automation Technology 

Associate in Applied Science Degree (735A) major code
The Automation Technology Program provides technical skills in industrial motor controls, PLCs, electrical principles, and hydraulics and pneumatics.
General Education Requirements ..... 15
COM 100 or 121 Communication ..... 3
ENG 101 or 152 English ..... 3
ENG 102 or 153 English ..... 3
Mathematics elective • ..... 3
Social and Behavioral
Sciences elective • ..... 3
Core Program Requirements ..... 19
AMT 100 Intro to Mfg Automation Systems ..... 3
CIS 110 Business Information Systems ..... 3
EGR 101 Engineering Graphics ..... 3
MTT 100 Safety Principles ..... 1
MTT 102 Manual Machine Shop Operations ..... 3
MTT 106 Computer Integrated Manufacturing ..... 3
MTT 110 Print Reading for the Trades ..... 3
Major Program Requirements ..... 24
AMT 102 Basic Electricity ..... 3
AMT 110 Machine Fundamentals ..... 3
AMT 120 Automated Systems I. ..... 3
AMT 121 Automated Systems II. ..... 3
AMT 122 Automated Systems III ..... 3
AMT 130 Fluid Power. ..... 3
AMT 200 Automated Programming I. ..... 3
AMT 201 Automated Programming II ..... 3
Electives2Select electives from: Auto Body Repair (ABR), Automation Technology (AMT),Automotive Technology (AUT), Business Administration (BUS), Computer AidedDesign and Drafting (CAD), Construction Management (CMT), ElectronicsTechnology (ELT), Heating, Ventilation and Air Conditioning (HVA), IndustrialTechnology (IDT), Internship (ITS), Machine Tool Technology (MTT), WeldingTechnology (WLD)60

## JobTitles

- Automation Technician
- Assemblers
- Industrial Maintenance Mechanics
- Fluid Power Technician
- Electro-Mechanical Technician


## About the Occupation

Individuals who study within this technical field can pursue a variety of career opportunities. Day-to-day job responsibilities include the application of electrical and mechanical skills for developing, installing, programming, and troubleshooting the complex machinery and sensors found in the modern manufacturing environment. Technicians will often work with programmable logic controllers (PLCs), hydraulic and pneumatic control systems, actuator and senor systems, and robotics. Automation occurs in a variety of industries including building maintenance, packaging, machine tool, automotive and allied fields.

Highlights of Waubonsee's Program

- Stackable certificates designed to prepare you for the workforce
- Students begin with learning basic logic and writing skills and advance through high-level programming
- Students gain experience in two programming platforms
- In high demand, WCC graduates work at many local manufacturing companies in roles from technician to engineering tech
- Extensive time in hands-on labs ensure that students have the real-world experience they need to succeed on the job.
Automation Technology
Certificate of Achievement (736B) major code
The Automation Technology certificate is designed to provide students with knowledge and skills in electrical systems, motor control, hydraulics and pneumatics, programmable logic controllers, instrumentation, workplace safety, problem solving, and teamwork.


## Course Requirements

AMT 100 Intro to Mfg Automation Systems.......... 3
AMT 102 Basic Electricity........................................ 3
AMT 110 Machine Fundamentals ........................... 3
AMT 120 Automated Systems I............................. 3
AMT 121 Automated Systems II............................. 3
AMT 122 Automated Systems III............................ 3
AMT 130 Fluid Power............................................. 3
AMT 200 Automated Programming I...................... 3
AMT 201 Automated Programming II..................... 3
MTH 103 Technical Mathematics........................... 3
MTT 100 Safety Principles...................................... 1

PROGRAM TOTAL

## Supply Chain Technician

## Certificate of Achievement

(738B) major code
The Supply Chain Technician Program covers the basic knowledge and skills needed for supply chain technicians to successfully work in an automated distribution center. Technicians install, operate, support, upgrade, troubleshoot and maintain the software, hardware and automated equipment and systems that support the supply chain.

## Course Requirements

AMT $105 \begin{aligned} & \text { Introduction } \\ & \text { to Automated Warehousing..................... } 3\end{aligned}$
AMT 130 Fluid Power.............................................. 3
AMT 200 Automated Programming I....................... 3
AMT 201 Automated Programming II...................... 3
ELT 110 DC-AC Circuit Analysis ............................. 4
ELT 235 Microprocessors ..................................... 4
MTT 100 Safety Principles....................................... 1
MTT 110 Print Reading for the Trades ..................... 3
MTH 103 Technical Mathematics............................. 3
WLD 100 Survey of Welding .................................... 3
PROGRAM TOTAL 30
Basic Mechatronics TechnologyCertificate of Achievement(739A) major code
Completion of this electronics technology certificate gives students a basic knowledge of electronics with the option to emphasize electrical maintenance.

## Course Requirements

ELT 101 Introductory Electronics ..... 4
ELT 110 DC-AC Circuit Analysis ..... 4
or
AMT 120 Automated Systems I ..... 3
ELT 120 Introduction to Solid State Devices ..... 4
or
IDT 250 Commercial and Residential Wiring ..... 3
PROGRAM TOTAL ..... 10

# Automotive Technology 

## Automotive Technology Associate in Applied Science Degree (710A) major code

The Automotive Technology Program provides students hands-on skills to work as an automotive technician. Courses prepare students to take select ASE certification tests. Waubonsee Community College's Automotive Technology Program is a master ASE and NATEF certified program.
General Education Requirements ..... 15
COM 100 or 121 Communications ..... 3
ENG 101 or 152 English ..... 3
ENG 102 or 153 English .....  3
Mathematics elective - ..... 3
Social and Behavioral Sciences elective - ..... 3
Note: Transfer students should consult with Counselingto select electives
Major Program Requirements - FirstYear ..... 26
AUT 100 Maintenance and Light Repair ..... 2
AUT 110 Engine Service I ..... 3
AUT 111 Automotive Power Trains ..... 3
AUT 112 Automotive Brake Systems ..... 3
AUT 113 Automotive Electrical/Electronic Systems. ..... 3
AUT 120 Engine Service II ..... 3
AUT 122 Automotive Suspension and Wheel Alignment
3
AUT 123 Automotive Ignition Systems3
Major Program Requirements - SecondYear ..... 24
AUT 116 Automotive Service Adviser ..... 3
AUT 231 Automatic Transmissions/Transaxles ..... 3
AUT 232 Advanced Brakes and Suspension Systems ..... 3
AUT 233 Applied Automotive Fuels and Electricity ..... 3
AUT 240 Service Shop Operations .....  3
AUT 243 Advanced Engine Control Systems ..... 3
AUT 245 Automotive Heating and Air Conditioning ..... 3
AUT 246 Automotive Accessories and Diagnostics ..... 3
PROGRAM TOTAL ..... 65

- See course choices listed on pages 72-73.

NOTE: All students enrolled in the Automotive Technology Program are required to provide their own hand tools, safety glasses, protective clothing and safety shoes.

## Job Titles

- Automotive Technician
- Automotive Lab Technician
- Automotive Service Manager
- Automotive Parts/Equipment Salesperson
- Automotive Technical Instructor
- Automotive Technical Writer


## About the Occupation

As automotive technology becomes increasingly sophisticated, the knowledge and skills required by automotive technicians are constantly changing. Today's automotive technicians must possess a strong mechanical aptitude and a sound understanding of automotive electronics and computer controls. They must be skilled problem solvers who are often called upon to quickly and accurately diagnose and repair the most hard-to-find problems.

## Highlights of Waubonsee's Program

- Waubonsee Community College's Automotive Technology Program is structured around Automotive Service Excellence (ASE) standards and has received Master Automotive Service certification by the National Automotive Technicians Education Foundation (NATEF).
- Waubonsee students have received more than 70 awards at SkillsUSA competitions over the years.


## Automotive Technology Awards

IL Skills USA
1st place: 2016
National Skills USA
8th place: 2016

## Professional

Certification Opportunities
Waubonsee's program prepares students to pass a variety of Automotive Service Excellence (ASE) Foundation certifications.

## Automotive Brake and Suspension

Certificate of Achievement (716A) major code
The Automotive Brake and Suspension Program provides students hands-on skills and prepares students to take the ASE Brakes Exam and the Suspension and Steering Exam.

## Course Requirements

AUT 100 Maintenance and Light Repair ................ 2
AUT 112 Automotive Brake Systems...................... 3
AUT 122 Automotive Suspension and Wheel Alignment............................... 3
AUT 232 Advanced Brakes and Suspension Systems ......................... 3

PROGRAM TOTAL

## Automotive Electrical/Electronics

Certificate of Achievement
(715A) major code
The Automotive Electrical/Electronics Program provides handson skills and prepares students to take the ASE Electrical Systems Exam.
Course RequirementsAUT 113 AutomotiveElectricity/Electronics Systems ................ 3
AUT 123 Automotive Ignition Systems ..... 3
AUT 233 Applied Automotive Fuels and Electricity ..... 3
AUT 243 Advanced Engine Control Systems ..... 3
AUT 246 Automotive
Accessories and Diagnostics ..... 3
PROGRAM TOTAL ..... 15

## Automotive Maintenance <br> Certificate of Achievement (713A) major code <br> The Automotive Maintenance Program provides students basic knowledge to diagnose and repair automotive systems. Students are prepared to take eight ASE automotive certification exams.

## Course Requirements

FirstYear ..... 26
AUT 100 Maintenance and Light Repair ..... 2
AUT 110 Engine Service I ..... 3
AUT 111 Automotive Power Trains ..... 3
AUT 112 Automotive Brake Systems. ..... 3
AUT 113 Automotive Electrical/ Electronic Systems ..... 3
AUT 120 Engine Service II ..... 3
AUT 122 Automotive Suspension and Wheel Alignment ..... 3
AUT 123 Automotive Ignition Systems ..... 3
AUT 124 Automotive Fuel and Emission Systems ..... 3
Second Year. ..... 24
AUT 116 Automotive Service Adviser ..... 3
AUT 231 Automatic Transmissions/Transaxles . ..... 3
AUT 232 Advanced Brakes and Suspension Systems ..... 3
AUT 233 Applied Automotive Fuels and Electricity ..... 3
AUT 240 Service Shop Operations ..... 3
AUT 243 Advanced Engine Control Systems ..... 3
AUT 245 Automotive Heating and Air Conditioning ..... 3
AUT 246 Automotive Accessories and Diagnostics ..... 3
PROGRAM TOTAL ..... 50.

## Automotive <br> Transmission and Driveline <br> Certificate of Achievement (717B) major code

The Automotive Transmission and Driveline Program provides hands-on skills to accurately diagnose and troubleshoot while preparing students to take the ASE Automatic Transmission/ Transaxle Exam and Manual Drive Train and Axle Exam.

## Course Requirements

AUT 100 Maintenance and Light Repair ................ 2
AUT 110 Engine Service I ....................................... 3
AUT 111 Automotive Power Trains .......................... 3
AUT 231 Automotive Transmissions/Transaxles ..... 3
AUT 232 Advanced Brakes and Suspension Systems ......................... 3
AUT 240 Service Shop Operations ......................... 3
PROGRAM TOTAL

## Engine Performance

Certificate of Achievement
(714A) major code
The Engine Performance Program provides hands-on skills and knowledge from fuel injection to computer controls, and prepares students to take the ASE Engine Performance Exam.

## Course Requirements

AUT 110 Engine Service I ...................................... 3
AUT 113 Automotive
Electricity/Electronics Systems ................ 3
AUT 123 Automotive Ignition Systems ................... 3
AUT 124 Automotive Fuel and Emission Systems ..................... 3
AUT $233 \begin{aligned} & \text { Applied Automotive } \\ & \text { Fuels and Electricity ................................ } 3\end{aligned}$
AUT 240 Service Shop Operations ......................... 3
AUT 243 Adv. Engine Control Systems................... 3
AUT 246 Automotive Accessories and Diagnostics ................... 3

PROGRAM TOTAL

## Automotive Recycling <br> Certificate of Achievement (718A) major code

The Automotive Recycling Program develops dismantling, parts grading, and quality control skills. Coursework also focuses on following environmental best practices during automotive recycling.

## Course Requirements

AUT 105 Automotive Recycling
PROGRAM TOTAL

## Light Duty Diesel Repair Certificate of Achievement (712A) major code

The Light Duty Diesel Repair Program provides students the technical knowledge and skills to diagnose, adjust, repair and overhaul light duty diesel vehicles under one ton classification.

## Course Requirements

AUT 100 Maintenance and Light Repair ................ 2
AUT 110 Engine Service I...................................... 3
AUT 113 Automotive Electrical/ $\quad$ Electronic Systems.................................. 3
AUT 250 Light Duty Diesel
Vehicle Engine Service I........................... 3
AUT 251 Light Duty Diesel
Vehicle Engine Service II.......................... 3
PROGRAM TOTAL .............................................................. 14
Automotive Transportation Service TechnologyAssociate in Applied Science Degree(711A) major code
The Automotive Transportation Service Technology Program provides hands-on skills and knowledge related to service management, parts management, specialty vehicle maintenance, alternative fuel technology, service training and prepares students to take specific ASE certification tests sponsored by the National Institute for Automotive Service Excellence. Waubonsee Community College's Automotive Transportation Service Technology Program is master ASE and NATEF certified.
General Education Requirements ..... 15
COM 100 or 121 Communications ..... 3
ENG 101 or 152 English ..... 3
ENG 102 or 153 English .....  3
Mathematics elective - ..... 3
Social and Behavioral
Sciences elective • ..... 3
Note: Transfer students should consult withCounseling to select electives.
Major Program Requirements - FirstYear. ..... 24
AUT 100 Maintenance and Light Repair ..... 2
AUT 110 Engine Service I ..... 3
AUT 112 Automotive Brake Systems ..... 3
AUT 113 Automotive Electrical/Electronic Systems ..... 3
AUT 116 Automotive Service Adviser ..... 3
AUT 117 Automotive Parts Specialist ..... 3
AUT 122 Automotive Suspension and Wheel Alignment. ..... 3
AUT 124 Automotive Fuel and Emission Systems ..... 3
MTT 100 Safety Principles ..... 1

# Business Administration 

Business Administration
Associate in Applied Science Degree (130C) major codeThe Business Administration Program allows students to focus on management ormarketing covering a broad spectrum of business principles and concepts.
General Education Requirements ..... 15
COM 100 or 121 Communications ..... 3
ENG 101 or 152 English .....  3
ENG 102 or 153 English ..... 3
Economics elective - ..... 3
Mathematics elective - ..... 3
Management Major Program Requirements ..... 33
ACC 101 or 202 Accounting ..... 3
ACC 125 or 203 Accounting ..... 3
BUS 100 Introduction to Business ..... 3
BUS 210 or 211 Business Law. ..... 3
BUS 215 Business Ethics ..... 3
BUS 220 Leadership in Business ..... 3
CIS 110 Business Information Systems ..... 3
CIS 112 Comprehensive Excel Spreadsheet ..... 3
MGT 200 Principles of Management ..... 3
MKT 200 Principles of Marketing ..... 3
Economics elective(recommend ECN201 or ECN202) .......... 3
Electives and Emphasis Areas12
Students wanting to specialize in a particular business area should select electives from one emphasis area; students wanting a more general approach can select any electives from the categories listed.
Management
BUS 225 Organizational Behavior. ..... 3
MGT 210 Supervisory Management ..... 3
MGT 215 Human Resources Management ..... 3
Marketing
MKT 210 Principles of Selling ..... 3
MKT 215 Principles of Advertising ..... 3
MKT 260 Consumer Behavior ..... 3

## Electives

Electives may be selected from: Accounting (ACC), Business Administration (BUS), Computer Information Systems (CIS), Construction Management (CMT), Economics (ECN), Finance (FIN), Internship (ITS), Management (MGT), Marketing (MKT), Real Estate (REL), World Wide Web (WEB), PSY 245.
PROGRAM TOTAL

- See course choices listed on pages 72-73.


## JobTitles

- Supervisor
- Manager
- Customer Relations Specialist
- Marketing and Communications Specialist


## About the Occupation

Business administration careers encompass planning, organizing, directing and evaluating business functions essential to efficient and productive business operations. These career opportunities are available in every sector of the economy.

## Highlights of Waubonsee's Program

- As in all of Waubonsee's business programs, management and marketing students are encouraged to complete an internship to gain both college credit and valuable on-the-job experience.
- Waubonsee Community College is accredited by Alpha Beta Gamma International Business Honor Society to initiate members into the honor society for business and related professional disciplines. For additional information about the society, visit www.abg.org.


## Professional

Association Opportunities:

- American Management Association (AMA) - This international organization is dedicated to building management excellence. Student membership is available. Visit www.amanet.org.
- American Marketing Association (AMA) - The AMA is the largest worldwide professional marketing association and leading source for information in the marketing profession. Student membership is available. Visit www.marketingpower.com.
Administrative AssistantCertificate of Achievement(077A) major codeThe Administrative Assistant Program provides essential officeskills, software knowledge, project management skills,andcustomer service with an emphasis on teamwork.
Course Requirements
BUS 100 Introduction to Business ..... 3
BUS 130 Customer Service ..... 3
CIS 106 PowerPoint and Publisher for Business... ..... 3
CIS 108 Comprehensive Word Processing ..... 3
CIS 112 Comprehensive Excel Spreadsheet ..... 3
CIS 114 Comprehensive Access Database. ..... 3
PROGRAM TOTAL ..... 18


## Management

Certificate of Achievement (138B) major code
This certificate program provides a foundation in supervisory, human resource and business leadership principles.
Course Requirements
BUS 100 Introduction to Business ..... 3
BUS 220 Leadership in Business ..... 3
CIS 110 Business Information Systems .....  3
MGT 200 Principles of Management ..... 3
MGT 210 Supervisory Management ..... 3
MGT 215 Human Resources Management I ..... 3
PROGRAM TOTAL ..... 18
Marketing
Certificate of Achievement (153A) major code
This certificate program provides a foundation in common salesand marketing concepts and principles.
Course Requirements
ACC 202 or 101 Accounting .....  3
BUS 100 Introduction to Business ..... 3
CIS 110 Business Information Systems ..... 3
MKT 200 Principles of Marketing ..... 3
MKT 210 Principles of Selling ..... 3
MKT 260 Consumer Behavior ..... 3
PROGRAM TOTAL ..... 18

# Computer Aided Design and Drafting 

CAD-Computer AidedDesign and DraftingAssociate in Applied Science Degree(200A) major codeThe CAD Program provides essential skills in print reading, geometric dimensioningand tolerancing, 2D design, 3D modeling and 3D printing.
General Education Requirements ..... 15
COM 100 or 121 Communications ..... 3
ENG 101 or 152 English ..... 3
ENG 102 or 153 English ..... 3
Mathematics elective* ..... 3
Social and Behavioral
Sciences elective • ..... 3
Core Program Requirements ..... 16
AMT 100 Intro to Mfg Automation Systems ..... 3
CIS 110 Business Information Systems ..... 3
EGR 101 Engineering Graphics .....  3
MTT 100 Safety Principles ..... 1
MTT 102 Manual Machine Shop Operations .....  3
MTT 106 Computer Integrated Manufacturing.. ..... 3
CAD Major Program Requirements ..... 23
CAD 102 AutoCAD I ..... 3
CAD 120 AutoCAD II ..... 3
CAD 122 Geometric Dimensioning/Tolerancing ..... 2
CAD 240 Intro-Parametric Modeling/SolidWorks... ..... 3
CAD 242 Adv Parametric Modeling/SolidWorks. ..... 3
CAD 243 Adv Parametric Modeling/Inventor ..... 3
CAD 270 Product Design and Development ..... 3
Electives ..... 6
Select electives from: Art (ART110/111 and ART120/121), Automation Technology (AMT), Business Administration (BUS), Computer Aided Design and Drafting (CAD), Computer Information Systems (CIS), Construction Management (CMT), Electronics Technology (ELT), Industrial Technology (IDT), Internship (ITS), Machine Tool Technology (MTT), Management (MGT), Marketing (MKT), Mathematics (MTH), Welding Technology (WLD).60

* See Counseling for additional elective recommendations.

[^1]
## JobTitles

- Designer
- Modeler
- Computer-Assisted Design Technician


## About the Occupation

Nearly everything manufactured and built in today's society starts with computergenerated drawings. Drafters and designers work in a variety of industries, including manufacturing, construction and transportation. Using the latest computer aided design (CAD) systems, they create both 2D and 3D drawings for everything - from the simplest products like a plastic cup to the largest and most complex structures such as bridges and skyscrapers.

Highlights of Waubonsee's Program

- The CAD lab's 3D printer allows students to print out prototypes of their designs in about an hour, so they can better visualize and verify their ideas.
- Students get to practice reverse engineering using the 3D laser scanner.
- Students can develop 2D, 3D and parametric modeling skills.
- Degree-seeking students can choose from a wide range of electives to tailor their degree to their personal goals.
- Courses in art, manufacturing and business give students the comprehensive knowledge they need to become effective product designers.
Computer Aided DraftingCertificate of AchievementMajor Code 209E
This program prepares students for entry level computer aided drafting positions in a variety of fields. Students learn to create 2D CAD and 3D CAD using Geometric Dimensioning and Tolerancing standards.


## Course Requirements

CAD 102 AutoCAD I.............................................. 3
CAD 120 AutoCAD II............................................. 3
CAD 122 Geometric Dimensioning/Tolerancing .... 2
EGR 101 Engineering Graphics ............................... 3
$\qquad$

## Advanced Computer Aided Design and Drafting

## Certificate of Achievement Major Code 211B

This program builds on the computer aided drafting certificate and provides students with advanced computer aided design and drafting skills, including parametric modeling.

## Course Requirements

CAD 102 AutoCADI ..... 3
CAD 120 AutoCAD II ..... 3
CAD 122 Geometric Dimensioning/Tolerancing ..... 2
CAD 240 Intro-Parametric Modeling/SolidWorks ..... 3
CAD 241 Intro-Parametric Modeling/Inventor. ..... 3
CAD 242 Adv Parametric Modeling/SolidWorks ..... 3
CAD 243 Adv Parametric Modeling/Inventor ..... 3
EGR 101 Engineering Graphics ..... 3
PROGRAMTOTAL ..... 23


Manufacturing Technology at Waubonsee Community College includes: Automation, Advanced Manufacturing, Computer Aided Design (CAD) and Welding Technology. You will practice skills on the state-of-the-art machines, including Computer Numerical Control (CNC) lathes and milling machines, while additional laboratories provide valuable experience learning to install, maintain, operate and service all types of automated systems and using AutoCAD software and computer aided manufacturing using Mastercam and Esprit software. You can also learn a variety of welding processes to meet the challenges of advanced technology and new materials.

Using a combination of your own imagination and the latest technology, you'll solve problems and create better products for the future. And because the field is so diverse, it provides unlimited opportunities for people of all personalities and education levels.

You can prepare for a career in modern manufacturing by earning a degree or certificate at Waubonsee. Our program has strong ties to the real world of work due to our experienced faculty members and our support of the National Association of Manufacturers endorsed Stackable Certification System. This system aligns industry-validated credentials from such organizations as the Manufacturing Skill Standards Council (MSSC), National Institute for Metalworking Skills (NIMS) and the Occupational Health and Safety Administration (OSHA) with academic programs and occupations in all manufacturing sectors.

Earn a certificate or a degree in one or more of the manufacturing technology programs to meet the demands of employers in modern manufacturing who are specifically looking to hire multi-skilled technicians into new and up-todate operations.

# Computer Information Systems 

## Computer Software Development Associate in Applied Science Degree (220D) major code

The Computer Software Development Program provides students concepts and principles in computer programming with an emphasis on logic, data organization and problem solving.
General Education Requirements ..... 15
COM 121 or 100 Communications. ..... 3
ENG 101 or 152 English ..... 3
ENG 102 or 153 English ..... 3
Economics elective ..... 3
Mathematics elective - ..... 3
CIS Core Program Requirements ..... 15
CIS 110 Business Information Systems ..... 3
CIS 115* Introduction to Programming ..... 3
CIS 170 Networking Essentials ..... 3
CIS 205 Information
Technology Project Management ..... 3
WEB 110 Web Development With HTML ..... 3
Computer Software Development Major Program Requirements ..... 27
BUS 100 Introduction to Business ..... 3
CIS 116* Structured Program Design ..... 3
CIS 150 Java Programming. ..... 3
CIS 180 Linux/UNIX Operating System ..... 3
CIS 202 Data Management ..... 3
Two Languages - 1st and 2nd Semester(see options list on next page)12
Electives ..... 3
Select electives from: Computer Information Systems (CIS),Geographic Information Systems (GEO130 and GEO131),Internship (ITS), World Wide Web (WEB).
(continued on next page)

## JobTitles

- Computer Operator
- Computer Programmer
- Computer Programmer/Analyst
- Help Desk Specialist
- Network Administrator


## About the Occupation

Computer programmers write software, list logical steps the computer follows to organize data, solve a problem or do some other task. Applications programmers write programs to handle specific jobs. Systems programmers usually work for organizations with large computer centers and for firms that manufacture computers or develop software. They make changes in the sets of instructions that determine how the computer handles the various jobs it has been given.
Networking and the proliferation of computers in business supports new career opportunities. Help desk specialists assist business personnel in using the computer as an effective tool.

## Highlights of Waubonsee's Program

- Each degree includes a set of five core information systems courses, along with well-defined elective choices.
- Waubonsee Community College is accredited by Alpha Beta Gamma International Business Honor Society to initiate members into the honor society for business and related professional disciplines. For additional information about the society, visit www.abg.org.


## Language options

Complete a first and second semester of two languages from the options listed.
Visual BASIC Language
CIS 120 VB.NET Programming .............................. 3
CIS 220 Advanced VB.NET, ASP.NET...................... 3
C++ Programming Language
CIS 130 C++ Programming .................................. 3
CIS 230 Advanced C++ ......................................... 3

## Java Language

CIS 250 Advanced Java......................................... 3
CIS 252 Mobile Device $\begin{aligned} & \text { Application Programming ....................... } 3\end{aligned}$
Web Language
CIS 142 JavaScript Programming ........................ 3
CIS 261 PHP Web Server Programming .............. 3
PROGRAM TOTAL ............................................................... 60

* Students with limited exposure to computer concepts are encouraged to take CIS 110 before taking CIS 115 and CIS 116.
- See course choices listed on pages 72-73.


## Computer <br> Software Development <br> Certificate of Achievement (228B) major code <br> The Computer Software Development Program provides students basic knowledge, skills and the option to focus on select programming languages.

## Course Requirements

CIS 110 Business Information Systems ..... 3
CIS 115 Introduction to Programming ..... 3
CIS 116 Structured Program Design ..... 3One Language -1st and 2nd Semester (see options) ....... 6
Language options
Complete a first and second semester of one language fromthe options listed.
Visual BASIC Language
CIS 120 VB.NET Programming ..... 3
CIS 220 Advanced VB.NET, ASP.NET ..... 3
C++ Programming Language
CIS 130 C++ Programming ..... 3
CIS 230 Advanced C++ ..... 3
Java Language
CIS 150 Java Programming ..... 3
CIS 250 Advanced Javaor
CIS 252 Mobile DeviceApplication Programming3
Web Language
CIS 142 JavaScript Programming ..... 3
CIS 261 PHP Web Server Programming ..... 3
PROGRAM TOTAL ..... 15
Computer GamingCertificate of Achievement(239A) major code
The Computer Gaming Program provides students fundamentalskills to develop web-based and computer-based games.
Course Requirements
CIS 115 Introduction to Programming ..... 3
CIS 185 Game Design ..... 3
CIS 186 Game Development ..... 3
GRD 170 Digital Image ..... 3
GRD 280 2-D Animation and Multimedia ..... 3
GRD 285 3-D Animation and Multimedia ..... 3
WEB 110 Web Development with HTML ..... 3
PROGRAM TOTAL ..... 21

PROGRAM TOTAL ............................................................... 21

## Computer Support <br> Associate in Applied Science Degree (223A) major code <br> The Computer Support Program provides students a background in computer operating systems, applications and networks necessary to perform computer support work within a variety of industries.

General Education Requirements ..... 15
COM 121 or 100 Communications ..... 3
ENG 101 or 152 English ..... 3
ENG 102 or 153 English ..... 3
Mathematics elective $\bullet$ ..... 3
Economics elective• ..... 3
CIS Core Program Requirements ..... 15
CIS 110 Business Information Systems ..... 3
CIS 115 Introduction to Programming ..... 3
CIS 170 Networking Essentials ..... 3
CIS 205 Information Technology Project Management ..... 3
WEB 110 Web Development With HTML ..... 3
Computer Support
Major Program Requirements ..... 24
BUS 130 Customer Service ..... 3
BUS 100 Introduction to Business ..... 3
CIS 106 PowerPoint Presentations for Business ..... 3
CIS 108 Comprehensive Word Processing ..... 3
CIS 112 Comprehensive Excel Spreadsheet ..... 3
CIS 114 Comprehensive Access Database ..... 3
CIS 176 Windows Server Administration ..... 3
CIS 180 Linux/UNIX Operating System ..... 3
Electives ..... 6
Select electives from: Computer Information Systems (CIS),World Wide Web (WEB)
PROGRAMTOTAL60

## Computer Support

 Certificate of Achievement (243A) major codeThe Computer Support certificate program provides students fundamental skills in computer-based support with an emphasis in software applications.
Course Requirements
CIS 106 PowerPoint and Publisher for Business. ..... 3
CIS 108 Comprehensive Word Processing ..... 3
BUS 130 Customer Service ..... 3
CIS 110 Business Information Systems ..... 3
CIS 112 Comprehensive Excel Spreadsheet ..... 3
CIS 114 Comprehensive Access Database. ..... 3
CIS 170 Networking Essentials ..... 3
WEB 110 Web Development With HTML ..... 3
PROGRAM TOTAL ..... 24
Office Software SpecialistCertificate of Achievement(245A) major code
This program provides students with skills word processing,spreadsheet, database, and presentation graphics.
Course Requirements
CIS 106 PowerPoint and Publisher for Business. ..... 3
CIS 108 Comprehensive Word Processing ..... 3
CIS 112 Comprehensive Excel Spreadsheet ..... 3
CIS 114 Comprehensive Access Database. ..... 3
PROGRAMTOTAL ..... 12

- See course choices listed on pages 72-73.


## Construction Management

## JobTitles

- Project Manager
- Site Superintendent
- Construction Manager
- Estimator
- Project Coordinator
- Contract Administrator


## About the Occupation

Construction projects include the building and modernization of homes, schools, hospitals, skyscrapers, roads, bridges, industrial parks and much more. Project managers, site superintendents, construction managers and others apply their knowledge and skills of materials, products and processes to oversee the completion of construction projects. In this vast industry, well-trained construction professionals become involved during the design and bidding phases of projects, and, after the job is awarded, they help assure that those projects are completed on time and within budget.

## Highlights of Waubonsee's Program

- The curriculum includes a project management course featuring the same scheduling software used by many construction firms.
- Waubonsee's program is suited for recent high school graduates as well as those who have been employed in construction and want to expand their skills for professional advancement.
- Students learn from faculty with decades of industry knowledge and hands on experience.
- Waubonsee Community College is accredited by Alpha Beta Gamma International Business Honor Society to initiate members into the honor society for business and related professional disciplines. For additional information about the society, visit www.abg.org.


## Construction Management Associate in Applied Science Degree (730B) major code

The Construction Management Program provides students with the fundamental principles, practices and processes of construction management.
General Education Requirements18
COM 121 or COM 100 Communications ..... 3
ECN 100 or ECN 201 Economics ..... 3
ENG 101 or ENG 152 English ..... 3
ENG 102 or ENG 153 English ..... 3
Mathematics elective $\bullet$ ..... 3
Physical Science elective $\bullet$ ..... 3
Construction Management Major Program Requirements. ..... 21
CMT 101 The Construction Industry ..... 3
CMT 105 Print Reading for Construction ..... 3
CMT 111 Construction Materials and Methods ..... 3
CMT 115 Construction
Materials and Methods II ..... 3
Select 9 semester hours
from the following CMT courses:
CMT 121 Sustainable Construction and Design Principles ..... 3
CMT 201 Codes, Contracts and Specifications ..... 3
CMT 210 Construction Estimating. ..... 3
CMT 215 Contract and Project Administration. ..... 3
CMT 225 Construction Project Management ..... 3
CMT 230 Construction Safety and Health. ..... 3
CMT 240 Construction Surveying ..... 3
Additional Program Requirements ..... 15
ACC 101 or ACC 202 Accounting ..... 3
BUS 100 Introduction to Business ..... 3
BUS 210 or BUS 211 Business Law ..... 3
CIS 110 Business Information Systems ..... 3
MGT 210 or MGT 200 Management ..... 3
Electives6
Select electives from: Accounting (ACC), Business Administration (BUS),Computer Aided Design and Drafting (CAD), Computer Information Systems(CIS), Construction Management (CMT), Heating, Ventilation and Air Conditioning(HVA), Industrial Technology (IDT), Internship (ITS), Machine Tool Technology(MTT), Management (MGT), Marketing (MKT), Real Estate (REL), WeldingTechnology (WLD), World Wide Web (WEB).
PROGRAM TOTAL60

- $\quad$ See course choices listed on pages 72-73.


## Construction Management

## Certificate of Achievement

(732A) major code
The Construction Management certificate program provides basic knowledge of construction industry standards, practices and a general understanding of the construction process.
Course Requirements ..... 12
CMT 101 The Construction Industry ..... 3
CMT 105 Print Reading for Construction ..... 3
CMT 111 Construction Materials and Methods I ..... 3
CMT 115 Construction
Materials and Methods II ..... 3
Electives ..... 6
Select electives from: Business Administration (BUS),
Computer Aided Design and Drafting (CAD), ConstructionManagement (CMT), Heating, Ventilation and Air Conditioning(HVA), Industrial Technology (IDT), Machine Tool Technology(MTT), Real Estate (REL), Welding Technology (WLD)
PROGRAM TOTAL ..... 18

## Criminal Justice

## JobTitles

- Police Officer
- Police Detective
- Corrections Officer
- Sheriff's Deputy
- Private Policing
- Parole Officer
- Probation Officer
- Forensics
- Federal Agent


## About the Occupation

Police officers, detectives and correction officers are employed to safeguard lives and property. They enforce the laws and regulations that protect the safety and constitutional rights of citizens.

## Highlights of Waubonsee's Program

- Many Waubonsee graduates have gone on to distinguished careers in criminal justice, including current Kendall County Sheriff Dwight Baird, current Aurora Police Chief Kristen Ziman, former Aurora Police Chief Greg Thomas, Associate Judge Tim McCann of the 16th Circuit Court, and Waubonsee Community College Criminal Justice Assistant Professor Pat Rolison.


## Eligibility and Hiring

Law enforcement agencies conduct a thorough background check on all job applicants, to include both their adult and juvenile records. It is highly unlikely that an agency will hire someone who has been convicted of a felony offense. Depending on the seriousness and circumstances of the crime, some agencies may hire applicants who have been convicted of a misdemeanor. Certain organizations have a zero tolerance policy when it comes to illegal drug use by applicants.

Law enforcement agencies require that police officer candidates be U.S. citizens, usually between 20 and 35 years old, and meet rigorous physical and psychological standards. Examinations often include tests of vision, hearing, strength, agility and mental health. Hiring usually depends on competitive written examinations and previous education and experience. Students should contact specific agencies for detailed hiring policies and procedures.

## Criminal Justice

## Associate in Applied Science Degree (550B) major code

The Criminal Justice degree is designed to meet the needs of individuals seeking employment in the field of law enforcement and corrections. The courses are both practical and theoretical and are supported by courses in the social sciences, natural sciences and humanities. The design of this degree, while not a transfer degree, can allow for transfer to a four-year institution.
General Education Requirements ..... 18
COM 100 Fundamentals of
Speech Communication .....  3
ENG 101 First-Year Composition I ..... 3
ENG 102 First-Year Composition II .....  3
PHL 100 Introduction to Philosophy ..... 3
PSY 100 Introduction to Psychologyor
SOC 100 Introduction to Sociology .....  3
Mathematics or Science elective - ..... 3
Criminal Justice Major Program Requirements ..... 33
CRJ 100 Introduction to Criminal Justice .....  3
CRJ 101 Introduction to Corrections ..... 3
CRJ 103 Criminal Justice Report Writing. ..... 3
CRJ 105 Patrol Operations ..... 3
CRJ 107 Juvenile Justice. ..... 3
CRJ 120 The American Court System ..... 3
CRJ 200 Criminal Investigation. ..... 3
CRJ 220 Criminal Law ..... 3
CRJ 230 Criminology ..... 3
CRJ 235 Multicultural Law Enforcement ..... 3
CRJ 250 Ethics in Criminal Justice ..... 3
Additional Program Requirements ..... 4
CIS 110 Business Information Systems ..... 3
PED 136 or 140 Physical Fitness* ..... 1
Electives ..... 5
Select electives from the courses listed.
CRJ 102 Criminal Justice Career Exploration ..... 2
CRJ 115 Accident Investigation ..... 3
CRJ 201 Crime Scene Investigation Laboratory ..... 3
CRJ 202 Drug Enforcement Investigation ..... 3
CRJ 226 Criminal Evidence ..... 3
CRJ 260 Leadership in Criminal Justice ..... 3
CRJ 296 SpecialTopics/Criminal Justice ..... 1-3
DIS 101 Disability in Society ..... 3
HSV 210 Psychopharmacology and the Addictive Process ..... 3
ITS 297 Internship ..... 1
ITS 298 Internship ..... 2
ITS 299 Internship ..... 3
PED 118* Personal Defense ..... 1
PED 141* Jogging .....  1
PED 142* Weight Training .....  1
PED 148* Conditioning ..... 1
PSY 226 Adolescent Psychology ..... 3
PROGRAM TOTAL ..... 60

- See course choices listed on pages 72-73.
* A maximum of 4 semester hours of PED activity courses may apply to a degree or certificate.


## Recommended Course Sequence for Criminal Justice Requirements



[^2]
# Early Childhood Education 

## JobTitles

- Preschool or Child Care Director
- Preschool or Child Care Teacher
- Preschool or Child Care Assistant
- Preschool or Child Care Classroom Aide
- School Teacher Aide
- Family Child Care Provider


## About the Occupation

The profession of early childhood education offers a wide variety of career opportunities, ranging from caring for infants and toddlers to working with school-age children to supervising child care centers and programs. Early childhood educators may choose to provide family child care services, seek employment in the corporate setting, or work in public or private preschools and child care centers.

## Highlights of Waubonsee's Program

- Early childhood education students often get the chance to observe at the college's on-site child care facilities.
- Waubonsee has been approved by the Illinois Network of Child Care Resource and Referral Agencies to offer seven professional credentials as part of the "Gateways to Opportunity: Illinois Professional Development System." These offerings include the Early Childhood Education Levels 2 and 4, Infant and Toddler Levels 2 and 4, and School-Age Levels 2 and 4.



## Early Childhood Education

## Associate in Applied Science Degree (570B) major code

The Early Childhood Education Program is designed to prepare professionals for a variety of positions within the field from caring for and educating infants, toddlers and preschoolers to managing a child care center or preschool program. It also prepares students to serve as a teacher's aide in a public school or to work in school-age child care programs.

Waubonsee Community College's Early Childhood Education Program is an entitled program which offers the coursework to attain the Early Childhood Education Level 2 and 4, and Infant and Toddler Level 2 and 4, through Gateways. Students may choose to apply to Gateways to receive these credentials. Additional application fees may apply. Please note a high school diploma or high school equivalency is required in order to receive any of the following credentials. Gateways credentials are awarded and recognized by the Illinois Department of Human Services Bureau of Child Care and Development. Gateways credentials are symbols of professional achievement.

For further information regarding the attainment of the Gateways credentials or other program questions, contact Carla Diez, Associate Professor of Early Childhood Education, ext. 2311, or Linda O'Connell-Knuth, Assistant Professor of Early Childhood Education, ext. 6698.
$\left.\begin{array}{lll}\text { General Education Requirements ..................................................................................................................................... } 3\end{array}\right]$

General Education Requirements .18

ENG 101 First-Yar Composition I ........... 3
ENG 102 First-Year Composition II .......................... 3
PSY 100 Introduction to Psychology....................... 3
SOC 120 Racial and Ethnic Relations or
SOC 130 Sociology of Family ................................. 3 Math or Physical and Life Sciences elective •........................... 3

## Early Childhood Education

Major Program Requirements .. 36
Students pursuing the ECE Credential Level 4 or the Infant and Toddler Credential
Level 4 are required to complete this core group of courses.
Introduction
to Early Childhood Education .................. 3
m ECE 106 Guiding Young Children ........................... 3
m ECE 115 Child Growth and Development............. 3
m ECE 120 Health, Safety and Nutrition .................... 3
m ECE 125 Child, Family and Community ................ 3
m ECE 130 Observation and Assessment................ 2
m ECE 140 Inclusion in Early Childhood:
Birth Through Age Eight .3
m ECE 198 Curriculum
$m$ ECE 210 Language Arts for the Young Child .......... 3
m ECE 215 Creative Activities for the Young Child.... 3
m ECE 220 Mathematics and
Science for the Young Child.................... 3
m ECE 250 Early Childhood Education Practicum..... 4

Electives and Emphasis Areas $\qquad$6

Students who plan to teach in Early Childhood Education settings or those pursuing Early Childhood Education Level 4 should select electives from Early Childhood Education Level 4 emphasis; students who are pursuing Infant and Toddler Level 4 or School-Age Level 4 should complete the specialized courses listed in the Infant and Toddler Level 4 emphasis or in the School-Age Level 4 emphasis.

## Early Childhood Education Level 4 Emphasis

Select electives from the courses listed.
m ECE 102 Career Explorations in Early Childhood .. 3
m ECE 104 Infant and Toddler Development............. 3
m ECE 107 Development and Guidance of the School-Age Child 3
m ECE 145 Multiculturalism in Early Childhood ........ 3
m ECE 204 Infant and Toddler Curriculum................. 3
m ECE 207 School-Age Programming........................ 3
m ECE 225 Play and Creative
Expression for the Young Child
.3
$m$ ECE 230* Early Childhood Center Administration... 3

## Infant and Toddler Level 4 Emphasis

Complete the courses listed.
m ECE 104 Infant and Toddler Development............. 3
m ECE 204 Infant and Toddler Curriculum.................. 3
School-Age Level 4 Emphasis
Complete the courses listed.
m ECE 107 Development and Guidance of the
School-Age Child
m ECE 207 School-Age Programming........................ 3
PROGRAM TOTAL ............................................................... 60

- See course choices listed on pages 72-73.
m Major course requires minimum grade of $C$.


## Recommended Course Sequence for Early Childhood Education Requirements



* Please consult course descriptions for prerequisites for electives.
** All required courses must be completed to enroll.


## Child Care Worker Certificate of Achievement (572B) major code

The Child Care Worker certificate prepares students to work as teachers, teacher's aides, or other assistants in a variety of early childhood education settings. The coursework aligns with the State of Illinois Department of Children and Family services licensing standards for child care staff, and students with the certificate and the requisite number of contact hours with children may be qualified, subject to the requirements of individual programs, for positions as early childhood education teachers in licensed facilities.
Course Requirements
ECE 101 Introduction to Early Childhood Education ................. 3
ECE 106 Guiding Young Children ..... 3
m ECE 115 Child Growth and Development ..... 3
ECE 120 Health, Safety and Nutrition ..... 3
ECE 125 Child, Family and Community ..... 3
m ECE 130 Observation and Assessment ..... 2
m ECE 140 Inclusion in Early Childhood: Birth Through Age Eight ..... 3
m ECE 198 Curriculum
for Early Childhood Programs ..... 3
m ECE 210 Language Arts for the Young Child ..... 3
m ECE 215 CreativeActivities for the Young Child.................. 3ECE 220 Mathematicsand Science for the Young Child ............. 3
m

PROGRAM TOTAL32

Major course requires minimum grade of $C$.

## Early Childhood Education Level 2

## Certificate of Achievement

 (573C) major codeThis certificate/credential provides students the essential knowledge, skills and experience necessary to provide quality programing for children birth through age 8. Gateways credentials are awarded and recognized by the Illinois Department of Human Services Bureau of Child Care and Development. Gateways credentials are symbols of professional achievement.

| Course Requirements |  |  |
| :--- | ---: | :--- |
| ECE | 101 | Introduction to |
|  |  | Early Childhood Education....................... 3 |
| ECE | 106 | Guiding Young Children ........................ 3 |
| ECE | 115 | Child Growth/Development ................ 3 |
| ECE | 120 | Health, Safety and Nutrition ................ 3 |
| ECE | 130 | Observation and Assessment .............. 2 |
| ECE | 198 | Curriculum for |
|  | Early Childhood Programs ...................... 3 |  |

PROGRAM TOTAL ..... 17

Major course requires minimum grade of C.

To obtain the Gateways credential, students must have a high school diploma or high school equivalency and apply via Gateways.

## Infant and Toddler Level 2

Certificate of Achievement (574C) major code
This certificate/credential provides students who wish to specialize in working with infants and toddlers the essential knowledge, skills and experience necessary to provide quality programming. Gateways credentials are awarded and recognized by the Illinois Department of Human Services Bureau of Child Care and Development. Gateways credentials are symbols of professional achievement.

## Course Requirements

| $m$ | ECE | 101 | Introduction to |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  | Early Childhood Education..................... 3 |  |  |
| $m$ | ECE | 104 |  |  |

m ECE 104 Infant and Toddler Development............. 3
m ECE 106 Guiding Young Children .......................... 3
m ECE 115 Child Growth and Development ............. 3
m ECE 120 Health, Safety and Nutrition .................... 3
m ECE 130 Observation and Assessment................ 2
m ECE 198 Curriculum for Early Childhood Programs ............................... 3

PROGRAM TOTAL
NOTE: Students must complete 200 hours of documented work experience in an infant and toddler program within a two-year time period to attain the Infant and Toddler Credential Level 2.
m Major course requires minimum grade of $C$.
To obtain the Gateways credential, students must have a high school diploma or high school equivalency and apply via Gateways.

## School-Age Level 2 <br> Certificate of Achievement (575C) major code

This certificate acquaints students with basic knowledge about the development, guidance, and appropriate curriculum for a schoolage program.

## Course Requirements

ECE 101 Introduction to Early Childhood Education ................. 3
m ECE 107 Development and Guidance of the School-Age Child.......... 3

PROGRAM TOTAL .6
m Major course requires minimum grade of $C$.
To obtain the Gateways credential, students must have a high school diploma or high school equivalency and apply via Gateways.

# Emergency Medical Technician 

## JobTitle

- Emergency Medical Technician-Basic
- Paramedic


## About the Occupation

People's lives depend on the quick reaction and expertise of emergency medical technicians (EMTs). EMTs treat victims of automobile accidents, heart attacks, drownings, gunshots, and childbirth at the scene. Following strict guidelines, EMTs give appropriate emergency care and then transport the sick or injured to a medical facility. The specific responsibilities of the EMT depend on the level of qualification and training.

## Highlights of Waubonsee's Program

- The Paramedic Program is accredited by the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP).


## Professional <br> Certification Opportunities

Students who complete the paramedic classes (EMT 124-299) are prepared to take either the paramedic licensure examination through the Illinois Department of Public Health or the National Registry of Emergency Medical Technician Examination.

## Emergency Medical Technician - Paramedic

## Associate in Applied Science Degree (400B major code)

The Emergency Medical Technician - Paramedic degree represents collaboration between Waubonsee Community College and the Southern Fox Valley Emergency Medical Services System (SFVEMSS) Paramedic Training Program based at Delnor Hospital. This degree program prepares individuals for employment as paramedics in fire departments and fire protection districts. Those entering the degree program must have a current license as an EMT-B (Emergency Medical Technician-Basic) and acceptance into the EMT-Paramedic Program.
General Education Requirements ..... 15
COM 100 or COM 121 Communications ..... 3
ENG 101 or ENG 152 English ..... 3
ENG 102 or ENG 153 English ..... 3
BIO 100 Introduction to Biology ..... 3Social Scienceelective (SOC 120 suggested)................. 3
EMT-Paramedic MajorProgram Requirements47
m EMT 120 EMT-Basic ..... 9
m EMT 124 Survey of Paramedic Skills ..... 6
m EMT 125 Paramedic I ..... 6.5
m EMT 126 Paramedic II ..... 6.5
m EMT 127 Paramedic III ..... 4.5
m EMT 128 Paramedic IV ..... 4.5
m EMT 130 In-Hospital ClinicalExperience for the Paramedic I 1
m EMT 131 Field Clinical Experiencefor the Paramedic I 1
m EMT 230 In-Hospital Clinical Experience for the Paramedic II ..... 3
m EMT 231 Field Clinical Experience for the Paramedic II .....  2
m EMT 299 Paramedic Internship ..... 3
PROGRAMTOTAL ..... 62

Veterans or military members eligible for education benefits should see Programs with Special Admission Applications, page 228.
m Major course requires minimum grade of $C$.

## PROCEDURE FOR ENTERING THE EMERGENCY MEDICALTECHNICIAN PROGRAM - PARAMEDIC

The Emergency Medical Technician Program - Paramedic is offered in a 12-month program format which runs from January through December. Students seeking admission to the paramedic program are required to:

1. Complete the special application required for entry into the program, which is available in the Health Professions and Public Service office or at http://www.sfvemss.com after June 1 , each year. This application must be returned by July 15 with appropriate documents, including the New Student Information Form.
2. Prospective students that have submitted the application and the New Student Information Form will receive a testing ticket via written mail that will outline the testing process. The testing will include the Paramedic Entrance Exam, reading, writing, and/or math assessments required. Placement in the program is based on multiple criteria, including a successful score of $75 \%$ on the Paramedic Entrance Exam.
3. All applicants will be notified by written mail of their tentative acceptance status.

## Emergency Medical Technician-Basic

## Certificate of Achievement (402A) major code

This certificate program prepares individuals for employment as primary medical responders or as ambulance personnel. Those receiving the certificate are prepared to take either the state licensure examination, Emergency Medical Technician-Basic, through the Illinois Department of Public Health or the National Registry of Emergency Medical Technician Examination for employment as an Emergency Medical Technician-Basic (EMT-B). Additional education and experience offer the EMT-B certificateholder an opportunity for employment in a variety of occupations, including Paramedic. The course is taught to the National EMS Education Standards and the Illinois Department of Public Health (IDPH) Scope of Practice.

Students are eligible to take the state exam after successful completion of this certificate program. The State of Illinois requires that individuals possess a high school diploma or high school equivalency and be at least 18 years of age prior to certification testing. This course is also required as part of the Fire Science Technology Associate in Applied Science degree program.

## Requirements for Entering the Program:

- Have a current American Heart Association Basic Life Support (BLS) for Health Care Providers certification.
- Proof of up-to-date immunizations and 2-step tuberculosis testing required prior to emergency room experience.
- Be able to lift 150lb. with partner.


## Course Requirements

m EMT 120 Emergency Medical TechnicianBasic + .. 9

## PROGRAM TOTAL

 . .9+ Program admission required for enrollment.
m Major course requires minimum grade of $C$.


## Procedure for Entering the Emergency Medical Technician Program

The ability to register for the program is based on assessment results with documentation of reading skills at a 10th grade level. Students should contact Learning Assessment and Testing Services (see directory) for details.

## Program Costs

In addition to tuition and regular fees, the Emergency Medical Technician student has the following minimum fees and expenses: Textbook ................................................................................. $\$ 140$
CPR/BLS Certification ................................................................ $\$ 80$
IDPH Examination Fee.............................................................. $\$ 20$
Stethoscope ............................................................................ \$15
Immunizations/TB Testing......................... per health care provider
EMT Uniform Shirt................................................................... $\$ 20$
Total Estimated Costs
(excluding medical requirements)........................................... \$275
NOTE: These fees and expenses are approximate costs and are subject to change without prior notice to the student.

## Fire Science

## JobTitles

- Firefighter
- Fire Inspector
- Fire Chief
- Fire Engineer
- Fire Officer
- Fire Instructor


## About the Occupation

From entry-level firefighter through fire chief, firefighters work in teams to save lives, extinguish fires and respond to a variety of emergency situations. They also help prevent fires through public education and building inspections. Firefighters participate in training and practice drills throughout their careers. Highlights of Waubonsee's Program

- The Waubonsee fire science program is approved by the Office of the Illinois State Fire Marshal (OSFM) and complies with the latest OSFM curriculum.
- Students participate in live fire exercises during the Basic Operation Firefighter and Advanced Technician Firefighter Modules.


## Professional Certification Opportunities

- Basic Operations Firefighter
- Advanced Technician Firefighter
- Fire Apparatus Engineer Operations
- Hazardous Materials Operations
- Machine Operations
- Operations
- Technical Rescue Awareness
- Fire Instructor I and II
- Fire Officer I and II


## Enrollment and Experience

It is recommended that Fire Science majors either gain employment with a fire department or volunteer with a department as early as possible. Illinois State Fire Marshal certifications require experience with a department in addition to coursework. In order to take Illinois State Fire Marshall Certification exams, the student must be on a fire department.


## Fire Science Technology <br> Associate in Applied Science Degree (610A) major code

This degree is designed for individuals seeking a career in the fire service. All fire science courses at Waubonsee are approved by the Office of the Illinois State Fire Marshal.
General Education Requirements ..... 15
COM 100 or 121 Communications. ..... 3
ENG 101 or 152 English ..... 3
ENG 102 or 153 English ..... 3
Mathematics elective .....  3
Psychology or Sociology elective,
PSY 100 recommended. ..... 3
Fire ScienceTechnology Major Program Requirements. ..... 27
FSC 105 Basic Operation
Firefighter Module A ..... 4
m FSC 115 Basic Operation
Firefighter Module B ..... 4
m FSC 118 Basic Operation
Firefighter Module C ..... 4
m FSC 120 Hazardous Materials Operations ..... 3
m FSC 125 Advanced Technician Firefighter ..... 4
m FSC 150 Vehicle and Machinery Operations. ..... 3
m FSC 140 Fire Apparatus Engineer . ..... 4
m FSC 215 TechnicalRescue and Vehicle Operations.............. 1
Electives ..... 18
Select an elective from the courses listed.
m EMT 120 Emergency
Medical Technician-Basic. ..... 9
m FSC 160 Tactics and Strategy I ..... 3
m FSC 170 Fire Science Instructor I. ..... 3
$m \quad$ FSC 220 Fire Inspection and Prevention. ..... 3
m FSC 231 Fire Science Administration I. ..... 3
m FSC 232 Fire Science Administration II. ..... 3
m FSC 233 Fire Science Administration III. ..... 3
m FSC 234 Fire Science Administration IV ..... 3
$m$ FSC 260 Tactics and Strategy II .....  3
m FSC 270 Fire Science Instructor II ..... 3
ITS 297 Internship .....  1
ITS 298 Internship ..... 2
ITS 299 Internship ..... 3
PROGRAM TOTAL ..... 60

m Major course requires minimum grade of $C$.

## Program Costs

In addition to tuition and fees, the Fire Science Technology student has the following minimum fees and expenses:
Textbooks

## \$110

TextbookPhysical Exam$\$ 50$
Total Estimated Costs
(excluding medical requirements). ..... \$ 160

NOTE: These fees and expenses are approximate costs and are subject to change without prior notice to the student.

## PROCEDURE FOR ENTERING THE FIRE SCIENCETECHNOLOGY PROGRAM

Students need to provide proof of physical exam including approval to use respirator, proof of health and medical insurance. Students should refer to the current Fire Science Technology Student Handbook for appropriate waivers for participation.

## Firefighter

## Certificate of Achievement (612A) major code

This certificate is for those interested in completing the requirements for Basic Operations Certification or for those seeking advancement in the field.

| Course Requirements |  |  |  |
| :---: | :---: | :---: | :---: |
| m | FSC | 105 | Basic Operation |
|  |  |  | Firefighter Module A ........................... 4 |
| m | FSC | 115 | Basic Operation |
|  |  |  | Firefighter Module B ........................... 4 |
| m | FSC | 118 | Basic Operation |
|  |  |  | Firefighter Module C ............................ 4 |
| m | FSC | 120 | Hazardous Materials Operations ........... 3 |
| m | FSC | 215 | Technical |
|  |  |  | Rescue and Vehicle Operations............. 1 |

PROGRAM TOTAL ............................................................. 16
m Major course requires minimum grade of $C$.

## Fire Officer I

Certificate of Achievement (613C) major code
This certificate is designed for those wishing to pursue a career in fire science as an officer.

## Course Requirements

m FSC 105 | Basic Operation |
| :--- |
| Firefighter Module A ............................. 4 |

m FSC $115 \begin{aligned} & \text { Basic Operation } \\ & \text { Firefighter Module B ............................... } 4\end{aligned}$
m FSC 118 Basic Operation
Firefighter Module C ............................... 4
m FSC 120 Hazardous Materials Operations ............ 3
m FSC 125 Advanced Technician Firefighter ............... 4
m FSC 140 Fire Apparatus Engineer......................... 4
m FSC 150 Vehicle and Machinery Operations.......... 3
$m$ FSC 160 Tactics and Strategy I ............................. 3
m FSC 170 Fire Science Instructor I .......................... 3
m FSC 215 Technical
Rescue and Vehicle Operations.............. 1
m FSC 220 Fire Inspection and Prevention................. 3
m FSC 231 Fire Science Administration I.................. 3
m FSC 232 Fire Science Administration II................. 3
PROGRAM TOTAL .............................................................. 42
$\mathrm{m} \quad$ Major course requires minimum grade of $C$.

## Geographic Information Systems

## JobTitles

- Geographic Information Systems Technician
- Mapmaker
- Surveying Technician


## About the Occupation

GIS technicians work in the government sector, as well as industries such as communications, agriculture, engineering, health and human services, and education. Natural resource management groups, marketing firms, insurance companies, real estate developers and utility companies also employ GIS technicians, making this a rapidly growing field. Furthermore, GIS training can be of use to other professions such as drafting, surveying, computer programming and cartographic design.

## Highlights of Waubonsee's Program

- Students learn to use the most highly respected GIS software in the industry, ArcGIS, developed by Environmental Systems Research Institute, Inc. (Esri).
- Students have the opportunity to apply their knowledge and skills to complete a real-world project of their own choosing.
- The GIS program includes coursework in logistics management.
- Students who complete the four-course Geographic Information Systems certificate have the knowledge and skills to immediately seek entry-level employment in the ever-expanding field.


## Geographic Information Systems Associate in Applied Science Degree (260A) major code <br> Geographic Information Systems (GIS) technicians apply their knowledge of computers, electronics, and geography to create maps and graphs using special GIS software.

General Education Requirements ..... 15
COM 100 or 121 Communications. ..... 3
ECN 100 or 210 Economics ..... 3
ENG 101 or 152 English ..... 3
ENG 102 or 153 English ..... 3
MTH 107 Basic Statistics. ..... 3
Geographic Information Systems
Major Program Requirements. ..... 27
CAD 100 Technical Drawing ..... 3
CIS 110 Business Information Systems ..... 3
GEO 130 GIS and Mapping Principles ..... 3
GEO 131 Geographic Information Systems I. ..... 3
GEO 132 Geographic Information Systems II ..... 3
GEO 140 Geographic Information Systems III ..... 3
GEO 200 Applications for Geographic Information Systems ..... 3
GEO 210 GIS and Logistics Management ..... 3
GEO 120 World Regional Geography ..... or
GEO 220 Geography of the Developing World ..... 3
Electives ..... 18
Select electives from the disciplines listed:Business (BUS), Computer Aided Design and Drafting (CAD), Computer
Information Systems (CIS), Construction Management (CMT),
Earth Science (ESC), Economics (ECN), Geography (GEO), Graphic Design (GRD),Management (MGT), Marketing (MKT), Political Science (PSC), Real Estate (REL),Web Development (WEB).
PROGRAM TOTAL ..... 60

## Geographic <br> Information Systems

Certificate of Achievement
(263A) major code
The certificate program offers a sequence of courses to individuals who wish to learn GIS technology to begin or complement careers in government, planning, environment, public works and other urban agencies. The program provides a solid understanding of basic GIS concepts, technical and institutional factors in GIS design and implementation, and applications of the technology in various settings.

## Course Requirements

GEO 130 GIS and Mapping Principles ..................... 3
GEO 131 Geographic Information Systems I ......... 3
GEO 132 Geographic Information Systems II......... 3
GEO 120 World Regional Geography or
GEO 220 Geography of the Developing World ....... 3
PROGRAM TOTAL

## Advanced Geographic Information Systems <br> Certificate of Achievement (265B) major code

This advanced GIS certificate offers students a sequence of GIS courses that builds on basic GIS concepts to provide a working knowledge of more advanced software modeling techniques. Emphasis is placed on real world applications, including transportation logistics. The content of this certificate can be adapted to suit a variety of interests and to advance one's GIS knowledge within a specific industry sector.
Course Requirements ..... 21
GEO 120 World Regional Geography

            or
    GEO 220 Geography of the Developing World ....... 3
GEO 130 GIS and Mapping Principles ..... 3
GEO 132 Geographic Information Systems II ..... 3
GEO 140 Geographic Information Systems III ..... 3
GEO 200 Applications for Geographic Information Systems ..... 3
GEO 210 GIS and Logistics Management ..... 3 ..... 6
Select electives from the disciplines listed:
Business (BUS), Computer Aided Design and Drafting (CAD), Computer Information Systems (CIS), Construction Management (CMT), Earth Science (ESC), Economics (ECN), Geography (GEO), Graphic Design (GRD), Management (MGT), Marketing (MKT), Political Science (PSC), Real Estate (REL), Web Development (WEB).
PROGRAM TOTAL ..... 27

## Graphic Design

## JobTitles

- Graphic Designer
- Web Designer
- Animator/Illustrator
- Desktop Publishing Specialist
- Production Artist


## About the Occupation

Graphic designers create visual concepts using computer software to communicate ideas that inspire, inform, or captivate consumers. They help to make an organization recognizable by selecting color, images, or logo designs that represent a particular idea or identity to be used in advertising and promotions.
Most graphic designers are employed in specialized design services, publishing or advertising, public relations and related services. Designers need to continually redefine their field, and knowledge of current events and attitudes will help the designer create designs that reflect and affect society. As the number of people online continues to grow and the use of visual messages through television and film expands, the need for designers to shape the messages that society reads will increase dramatically.

Highlights of Waubonsee's Program

- At Waubonsee, students develop a professional portfolio that can help them land a job after graduation.
- Award winning faculty.
- Waubonsee Community College is accredited by Alpha Beta Gamma International Business Honor Society to initiate members into the honor society for business and related professional disciplines. For additional information visit www.abg.org.


## Graphic Design

## Associate in Applied Science Degree (930B) major code

The Graphic Design Program provides students fundamental skills in layout, design, desktop publishing and print preparation using industry software.
General Education Requirements ..... 15
COM 100 or 120 or 121
or 135 Communications ..... 3
ENG 101 or 152 English ..... 3
ENG 102 or 153 English ..... 3
Social and Behavioral Sciences elective(recommend PSY100).3
Mathematics elective (recommend
MTH101, MTH102, or MTH103) ..... 3
Graphic Design Major Program Requirements. ..... 43
ART 110 Design I ..... 3
ART 120 Basic Drawing I ..... 3
ART 142 Beginning Digital Photography ..... 3
GRD 135 Desktop Publishing ..... 3
GRD 160 Computer Illustration ..... 3
GRD 165 Typography ..... 3
GRD 170 Digital Image ..... 3
GRD 173 Graphic Design I ..... 3
GRD 190 Prepress and Print Production ..... 3
GRD 273 Graphic Design II ..... 3
GRD 280 2D Animation and Multimedia ..... 3
GRD 285 3D Animation and Multimedia ..... 3
GRD 292 Graphic Design Portfolio ..... 1
WEB 110 Web Development With HTML ..... 3
WEB 230 Dreamweaver ..... 3
Electives ..... 3
Select electives from the courses listed.
ART 111 Design II ..... 3
ART 112 Color. ..... 3
ART 260 Painting I ..... 3
ART 265 Watercolor ..... 3
GRD 290 Graphic Design Studio Art ..... 3
ITS 297 Internship ..... 1
ITS 298 Internship ..... 2
ITS 299 Internship ..... 3
MCM 243 Film Production ..... 3
PROGRAM TOTAL ..... 61

- See course choices listed on pages 72-73.
Graphic DesignCertificate of Achievement(938C) major codeThis program provides a practical hands-on experience indigital design and graphic fundamentals such as design, layouttechniques, computer applications, Web design, illustration/animation, digital prepress techniques and portfolio development.A professional portfolio will be expected to attain this certificate.
Course Requirements
ART 142 Beginning Digital Photography ..... 3
GRD 135 Desktop Publishing ..... 3
GRD 160 Computer Illustration ..... 3
GRD 165 Typography ..... 3
GRD 170 Digital Image ..... 3
GRD 173 Graphic Design ..... 3
GRD 190 Prepress and Print Production ..... 3
GRD 273 Graphic Design II ..... 3
GRD 280 2D Animation and Multimedia ..... 3
GRD 285 3D Animation and Multimedia ..... 3
GRD 292 Graphic Design Portfolio ..... 1
WEB 110 Web Development With HTML ..... 3
WEB 230 Dreamweaver ..... 3
PROGRAMTOTAL ..... 37


## Animation

## Certificate of Achievement (945A) major code

This certificate program provides students the tools to tell a story and give life to characters through the use of the most modern electronic media.

## Course Requirements

ART 110 Design I ..... 3
ART 120 Basic Drawing I ..... 3
ART 142 Beginning Digital Photography ..... 3
GRD 160 Computer Illustration ..... 3
GRD 170 Digital Image ..... 3
GRD 280 2D Animation and Multimedia ..... 3
GRD 285 3D Animation and Multimedia ..... 3
GRD 292 Graphic Design Portfolio ..... 1
WEB 230 Dreamweaver. ..... 3
PROGRAM TOTAL ..... 25


[^3]
## Web Design

## Certificate of Achievement

(944B) major code
This certificate program provides Web design fundamentals using multimedia, animation, sound and video in developing attractive and effective Web pages and publications.

## Course Requirements

ART 142 Beginning Digital Photography ..... 3
GRD 160 Computer Illustration ..... 3
GRD 170 Digital Image ..... 3
GRD 173 Graphic Design I ..... 3
GRD 280 2D Animation and Multimedia. ..... 3
GRD 292 Graphic Design Portfolio. ..... 1
WEB 110 Web Development with HTML ..... 3
WEB 230 Dreamweaver. ..... 3
WEB 250 Advanced Website Development ..... 3
PROGRAM TOTAL ..... 25

# Health Care Interpreting 

## Medical Interpreter Certificate of Achievement <br> (638A) major code

Medical Interpreter is a certificate program that trains bilingual individuals to be medical interpreters in health care settings. The certificate focuses on English/Spanish interpreting.

Course Requirements ....................................................... 8
HCl 120 Medical Interpreter................................... 8
PROGRAM TOTAL .8

## JobTitle

- Medical Interpreter


## About the Occupation

Medical interpreters work with non-English speaking patients in hospitals, physician's offices, clinics, rehabilitation facilities, nursing homes and mental health clinics. They act as conduits between patients and medical professionals by listening to the source language and interpreting that information into the patient's target language. The interpreter relays the message in a consecutive fashion using proper medical terminology. Interpreters may translate such information as the reason for a medical visit, past medical history and family medical history, as well as explaining medical and surgical procedures, giving medical care instructions, providing drug information and scheduling follow-up appointments.

During the visit, cultural misunderstandings between a professional and patient may occur. Medical interpreters must anticipate these events and try to avoid them. Interpreters also are privy to sensitive information, so they must maintain confidentiality at all times.

## Professional Certification Opportunities

Students who complete the certificate program are eligible to take the Certified Medical Interpreter (CMI) exam through the National Board of Certification for Medical Interpreters or the Certified Healthcare Interpreter (CHI) exam through the Certification Commission for Health Care Interpreters.

## Health Information Technology

## JobTitles

- Health Information Coder
- Medical Record Coder
- Coder/Abstractors
- Coding Specialist
- Cancer Registrar
- Medical Transcriptionist


## About the Occupation

The Health Information Technology Program prepares students for the vital role they will play as health information management professionals. Health information technicians verify the patient's health information or data within the medical record (both computer-based and paper) is complete, accurate, and maintained, while ensuring validity and appropriate access to the individual's health information. These health care professionals have very little direct patient contact and may work in a variety of health care settings to include hospitals, physicians offices, nursing homes, mental health facilities, and other organizations using patient health or data information. It is essential for the health information technician to effectively communicate with various individuals in the health care setting. After earning the RHIT certification and gaining experience, the profession demonstrates solid opportunities for career growth and advancement in education.

## Highlights of Waubonsee's Program

- Students in the degree program gain valuable hands-on experience in required practicum courses.


## Professional

Certification Opportunities

- The Commission on Accreditation of Health Informatics and Information Management Education (CAHIIM) accredits the Associate in Applied Science degree in Health Information Technology. Only graduates of an accredited health information management program are eligible for the national American Health Information Management Association (AHIMA) certification examination to become RHIT certified. Students are eligible for student membership and other discounts offered by AHIMA.
- Medical Coding certifications Students in the Health Information Technology program are encouraged to investigate certifications offered by AHIMA. For additional information visit www.ahima.org.


## Health Information Technology Associate in Applied Science Degree (110D) major code

The Health Information Technology degree is designed to meet the needs of individuals seeking employment in the field of health information management. The degree provides a comprehensive set of courses to learn the technical side of managing health information: collecting, organizing, analyzing, maintaining, protecting, and reporting. The skills and competencies learned in this degree can apply to a variety of areas in health information management: coding, reimbursement and insurance, computer information systems, and data retrieval.

The Waubonsee Community College Health Information Technology Program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM), on recommendation of the American Health Information Management Association (AHIMA).

CAHIIM - Commission on Accreditation for Health Informatics and Information Management Education
233 N. Michigan Ave., 21st Floor
Chicago, IL 60601
(312) 233-1100 Phone
(312) 233-1948 Fax
www.cahiim.org
AHIMA - American Health Information Management Association 233 N. Michigan Ave., 21st Floor
Chicago, IL 60601
(312) 233-1100 Phone
(312) 233-1090 Fax
www.ahima.org
General Education Requirements ..... 16
BIO 260 Human Structure and Function. ..... 4
COM 100 or 121 Communications. ..... 3
ENG 101 or 152 English ..... 3
ENG 102 or 153 English ..... 3
Social Science Elective ..... 3
Health Information Technology Core Program Requirements. ..... 13
m CIS 110 Business Information Systems ..... 3
m HIT 100 Introduction
to Health Information Technology.. ..... 3
m HIT 110 Medical Terminology ..... 3
m HIT 135 Health Care Delivery Systems .....  2
m HIT 140 Legal/Ethical Issues in Health Care. ..... 2


## Health Care Coding <br> Certificate of Achievement (118D) major code

This program prepares students for a career in medical coding. Medical coding opportunities exist in physician offices, billing companies, insurance offices and in the home. Students who complete this certificate are eligible to take the Certified Coding Associate (CCA) Exam or the Certified Coding Specialist (CCS) Exam.

## Course Requirements

m BIO 260 Human Structure and Function............... 4
m CIS 110 Business Information Systems .............. 3
m HIT $100 \begin{aligned} & \text { Introduction to Health } \\ & \text { Information Technology .......................... } 3\end{aligned}$
m HIT 110 MedicalTerminology............................... 3
m HIT 135 Health Care Delivery Systems ............... 2
m HIT 140 Legal/Ethical Issues in Health Care ........ 2
m HIT 210 ICD Coding............................................. 3
$m$ HIT 212 Inpatient Medical Coding ......................... 3
$m$ HIT 215 CPT Coding ............................................ 3
m HIT 216 Advanced Clinical Classification Systems ............................. 3
m HIT 218 Reimbursement Systems......................... 3
m HIT 220 Pathophysiology and Pharmacology for the Health Information Technology Professional3
m HIT 290 Professional Practicum Experience ......... 2
PROGRAM TOTAL ............................................................. 37
m Major course requires minimum grade of $C$.

# Heating, Ventilation and Air Conditioning 

## JobTitles

- Heating and Cooling Mechanic
- Furnace/Air Conditioning Installer
- Heating, Ventilation and Air Conditioning Contractor


## About the Occupation

Heating, ventilation and air conditioning (HVAC) technicians install, maintain and repair the heating and cooling systems that control temperature, humidity and air cleanliness in homes, schools and other buildings. Some technicians also work on refrigeration systems. They apply knowledge of gas, oil, water and electrical systems, along with sound problem solving skills. Many work with sheet metal, piping and a variety of mechanical components such as motors, compressors, condensing units and evaporators. HVAC career opportunities are expanding in the areas of geothermal and solar thermal systems.

## Highlights of Waubonsee's Program

- Waubonsee's HVAC lab includes a wide variety of heating, air conditioning and cooling systems. Students learn and develop their troubleshooting skills through hands-on training on "live" equipment.
- The Waubonsee curriculum allows students to choose from a wide range of technical electives, such as industrial motor controls and commercial and residential wiring.
- As part of their advanced coursework, Waubonsee students go out into the field to get real world experience.


## Professional

Certification Opportunities

- E.P.A. Federal Clean Air Act, Section 608 Certification


## Heating, Ventilation and Air Conditioning

Associate in Applied Science Degree (800A) major code

The Heating, Ventilation and Air Conditioning Program provides students with the essential skills to install, maintain, troubleshoot and repair residential and light commercial heating and cooling systems.
General Education Requirements ..... 15
COM 100 or 121 Communications. ..... 3
ENG 101 or 152 English ..... 3
ENG 102 or 153 English ..... 3
Mathematics elective • . ..... 3
Social and Behavioral Sciences elective ..... 3
HVAC Major Program Requirements ..... 20
HVA 110 Refrigeration Principles ..... 3
HVA 120 HVACR Electrical Systems ..... 3
HVA 130 Residential Comfort Systems ..... 3
HVA 140 Basic Heating Systems ..... 3
HVA 150 Basic Sheet Metal Fabrication and Print Reading ..... 3
HVA 160 Refrigerant Transition and Certification... .....
ITS 299 Internship ..... 3
MTT 100 Safety Principles ..... 1
Select from the following courses ..... 12
HVA 200 Sheet Metal Estimating, Fabrication and Installation ..... 3
HVA 205 Heating/Cooling and Installation. ..... 3
HVA 215 Commercial HVAC Systems ..... 3
HVA 230 Advanced HVAC Controls ..... 3
HVA 245 Load Calculations and Duct Design ..... 3
HVA 250 Residential Hydronic Boiler Technology ..... 3
Electives ..... 13
Select electives from: Auto Body Repair (ABR), Automation Technology (AMT),Automotive Technology (AUT), Business Administration (BUS), Computer AidedDesign and Drafting (CAD), Computer Information Systems (CIS), ConstructionManagement (CMT), Electronics Technology (ELT), Engineering (EGR), Heating,Ventilation and Air Conditioning (HVA), Industrial Technology (IDT), Internship (ITS),Machine Tool Technology (MTT), and Welding Technology (WLD).
PROGRAM TOTAL60

- See course choices listed on pages 72-73.


# Heating, Ventilation and Air Conditioning <br> Certificate of Achievement (804B) major code 

This certificate provides the fundamental skills necessary to install, maintain and service residential and light commercial systems.

## Course Requirements

HVA 110 Refrigeration Principles .......................... 3
HVA 120 HVACR Electrical Systems ..................... 3
HVA 130 Residential Comfort Systems................. 3
HVA 140 Basic Heating Systems .......................... 3
HVA 150 Basic Sheet Metal Fabrication and Print Reading................. 3
HVA 160 Refrigerant Transition and Certification ..................................... 1
MTT 100 Safety Principles....................................... 1
PROGRAM TOTAL

## Human Services

## JobTitles

- Certified Addictions Counselor
- Community Outreach Worker
- Family Support Worker
- Group Home Worker
- Mental Health Worker
- Residential Counselor
- Social Services Aide
- Youth Worker


## About the Occupation

Projected to be among the future's fastest growing occupations, human services workers are employed in a wide variety of settings under many different job titles that are all characterized by a single unifying feature - their primary job function is helping people cope with their problems.

## Highlights of Waubonsee's Program

- Because of its advanced accreditation from the Illinois Alcohol and Other Drug Abuse Professional Certification Association (IAODAPCA), graduates of Waubonsee's Human Services AAS degree program can become Certified Alcohol and Other Drug Abuse Counselors (CADC) and enter the workforce more quickly.
- Visits to and field experiences at local human services agencies allow students to see what career areas are a good fit for them.


## Human Services

## Associate in Applied Science Degree (650A) major code

This program prepares paraprofessionals for employment in a variety of social service organizations. The alcohol or other drug abuse (AODA) counseling program is accredited at the advanced level by the Illinois Alcohol and Other Drug Abuse Professional Certification Association (IAODAPCA).
General Education Requirements ..... 15
COM 100 Fund. of Speech Communication ..... 3
ENG 101 First-Year Composition I ..... 3
ENG 102 First-Year Composition II .....  3
PSY 100 Introduction to Psychology ..... 3
Mathematics/Science elective • ..... 3
Human ServicesMajor Program Requirements.20
HSV 105 Survey of Human Services. ..... 3
HSV 110 Group Dynamics. ..... 3
HSV 115 Crisis Intervention ..... 3
HSV 120 Introduction to Substance Abuse. ..... 3
HSV 140 Assessment and Treatment of the Dual-Disordered Client ..... 4
HSV 235 Human Services Seminar and Field Experience ..... 4
Additional Program Requirements ..... 6
CIS 110 Business Information Systems ..... 3
SPN 110 or SGN 101 ..... 3

Electives and Emphasis Area
Students wanting to specialize in addictions counseling should select electives from the emphasis area listed; students wanting a more general approach can select any electives from the categories listed.

## Addictions Counseling Emphasis

HSV 125 Counseling Theories and Strategies ........ 3
$\begin{aligned} \text { HSV } 210 & \begin{array}{l}\text { Psychopharmacology and the } \\ \text { Addictive Process.................................... } 3\end{array}\end{aligned}$
HSV 220 Addictions Counseling I............................ 3
HSV 225 Addictions Counseling II........................... 3
$\begin{aligned} & \text { HSV } 230 \text { Addictions Counseling Seminar } \\ & \text { and Field Experience I............................. } 3\end{aligned}$
HSV $240 \begin{aligned} & \text { Addictions Counseling Seminar } \\ & \text { and Field Experience II........................... } 3\end{aligned}$

## Electives

Electives may be selected from the courses listed.
HSV 205 PTSD-Modern Letters for an Ancient Condition........................... 1
HSV 215 Introduction to Social Work ..................... 3
HSV 296 Special Topics III ................................... 1-3
PED 211 First Aid and Emergency Care.................. 3
PSY 215 Adulthood and Aging ............................. 3
PSY 220 Child Psychology ...................................... 3
PSY 235 Social Psychology..................................... 3
SGN 101 Sign Language I........................................ 3
SGN 102 Sign Language II...................................... 3
SOC 100 Introduction to Sociology .......................... 3
SPN 111 Survival Spanish II .................................... 3
PROGRAM TOTAL

## Addictions Counseling

 Certificate of Achievement (652B) major codeThis certificate prepares individuals for employment as alcohol and other drug abuse (AODA) counselors in a variety of agencies and facilities that serve persons who are substance abusers. Students with prior and/or additional education can become AODA counselors as a result of completing this program. The program includes both classroom instruction and on-thejob training (field experience) and may be applied toward the Associate in Applied Science degree in human services. The program is accredited by the Illinois Alcohol and Other Drug Abuse Professional Certification Association (IAODAPCA).

## Course Requirements

HSV 105 Survey of Human Services ..... 3
HSV 110 Group Dynamics ..... 3
HSV 115 Crisis Intervention ..... 3
HSV 120 Introduction to Substance Abuse ..... 3
HSV 125 Counseling Theories and Strategies ..... 3
HSV 210 Psychopharmacology and the Addictive Process ..... 3
HSV 220 Addictions Counseling I ..... 3
HSV 225 Addictions Counseling II ..... 3
HSV 230 Addictions Counseling Seminar and Field Experience I ..... 3
HSV 240 Addictions Counseling Seminar and Field Experience II ..... 3
PROGRAM TOTAL ..... 30

- See course choices listed on pages 72-73.

Career Education

## Alcohol and Drug <br> Counselor Post Baccalaureate

## Certificate of Achievement

(655B) major code
This certificate prepares individuals with prior and/or additional relevant education for employment as alcohol or other drug abuse (AODA) counselors in a variety of agencies and programs that serve persons with substance use disorders. With classroom instruction to supplement previous coursework and field experience, students are able to complete the certification requirements of the Illinois Alcohol and Other Drug Abuse Professional Certification Association (IAODAPCA) to become Certified Alcohol and Drug (CADC) counselors.

HSV 120 Introduction to Substance Abuse............. 3
HSV 210 Psychopharmacology and the Addictive Process ........................ 3
HSV 220 Addictions Counseling I........................... 3
HSV 225 Addictions Counseling II.......................... 3
HSV 235 Human Services Seminar and Field Experience ................................ 4

PROGRAM TOTAL

# Interpreter Training 

## Interpreter Training <br> Associate in Applied Science Degree (660B) major code

Interpreter training is an Associate in Applied Science degree that prepares people to be sign language interpreters for the Deaf. Interpreter training was the first program of its kind established in Illinois in 1975. Waubonsee's program provides students with the opportunity to become proficient in American Sign Language and gain knowledge of Deaf culture.
First Semester ..... 15
ENG 101 First-Year Composition I ..... 3
PSY 100 Introduction to Psychology ..... 3
SGN 101 American Sign Language I .....  3
SGN 104 Signs of Everyday Use . .....  3
SGN 105 Linguistics of ASL I ..... 3
Second Semester ..... 15
ENG 102 First-Year Composition II ..... 3
SGN 102 American Sign Language II ..... 3
SGN 106 Linguistics of ASL II. ..... 3
SGN 108 Conceptually Accurate Signed English ..... 3
SGN 110 Introduction to American Deaf Culture ..... 3
Third Semester ..... 18
(All third-semester ITP courses must be taken concurrently.)
COM 100 Fund. of Speech Communication ..... 3
ITP 200 Introduction to Interpreting ..... 3
ITP 210 Etymology for Interpreters ..... 3
ITP 211 Transliterating I ..... 3
ITP 221 Interpreting I ..... 3
ITP 231 Sign to Voice I ..... 3
Fourth Semester ..... 18
(AII fourth-semester ITP courses must be taken concurrently and after successful completion of all third semester ITP courses.)
ITP 212 Transliterating II ..... 3
ITP 222 Topics in Interpreting ..... 3
ITP 223 Interpreting II ..... 3
ITP 230 Specialized Areas of Interpreting ..... 3
ITP 232 Sign to Voice II ..... 3Math or Physical and Life Scienceselective •................................................. 3
Fifth Semester3
ITP 290 The Interpreter as Practitioner + ..... 3
PROGRAM TOTAL ..... 69

- See course choices listed on pages 72-73.


## JobTitles

- Interpreter for the Deaf
- Sign Language Interpreter


## About the Occupation

Sign language interpreters facilitate communication between individuals who are deaf or hard of hearing and those who can hear. The interpreter is considered to be a bilingual/bicultural mediator in the communication exchange. Those engaged in conversation rely heavily on the skill, fluency, professionalism and ethical behavior of the interpreter. The interpreter is an integral part of the communication exchange.

Highlights of Waubonsee's Program

- In 1975, Waubonsee became the first college in the state to design an interpreter training program.
- The program utilizes technology to create a rich visual learning environment. Students' signing performances are captured by digital video cameras, uploaded to a computer and then reviewed by both the student and the instructor.

Career Education

## Procedure for Entering the Interpreter Training Program

Waubonsee offers a full-time Interpreter Training Program (ITP)
that must be completed in a block fashion. Students are eligible to register for ITP courses after completing the following steps:

1. Meet with Counseling to establish a schedule for taking the Sign Language (SGN) courses.
2. Complete all SGN courses with a grade of C or better; also, a grade of $C$ or better AND cumulative grade point average of 3.0 or higher in SGN104, SGN105, SGN106 and SGN108 is required.
3. Submit an ITP application by April 1.
4. Earn acceptable scores on the ITP admissions test. Contact the Learning Assessment and Testing Services for more information on the ITP admissions test and scores. Testing must be completed by May 1 before starting in the ITP that fall.
5. Complete the last SGN course within 18 months of planned start date for ITP. This requirement can only be waived by the Dean for Health Professions and Public Service when the student has documented interpreting experience.

## Procedure for Completing

## the Interpreter Training Program

To complete the Interpreter Training Program with a certificate or degree, students must complete the following steps:

1. Complete all ITP courses with a grade of C or better.
2. Complete all ITP courses within a three-year time period.
3. Complete all practicum hours.

ITP courses are only offered during the day. Students may repeat a course only once.

## Kinesiology

## Kinesiology

## Associate in Applied Science Degree (440B major code) <br> This two-year degree prepares the wellness specialist to assess, design and implement individual and group exercise and fitness programs for healthy individuals and individuals with controlled disease. The graduate will be skilled in evaluating health behaviors and risk factors, conducting fitness assessments, writing appropriate exercise prescriptions, and motivating individuals to modify negative health habits and maintain positive lifestyle behaviors for health promotion.

General Education RequirementsCOM 100 or 120 Communications ..... 3
ENG 101 or 152 English ..... 3
ENG 102 or 153 English ..... 3
MTH 104 Business Mathematicsor
MTH 107 Basic Statisticsor
BIO 200 Nutrition ..... 3
PSY 100 Introduction to Psychology ..... 3
Kinesiology Major Program Requirements ..... 40
BIO 260 Human Structure and Function ..... 4
HED 100 Personal Wellness ..... 3
ITS 298 Internship ..... 2
PED 150 Basic Prevention
and Care of Athletic Injuries ..... 3
PED 209 Intro-Exercise Science/Sports Prof ..... 3
PED 205 Sci Foundations of Human Movement. ..... 3
PED 211 First Aid and Emergency Care. ..... 3
PED 234 Group Exercise Instruction ..... 2
PED 236 Exercise for Special Populations ..... 3
PED 237 Strength and Conditioning Principles ..... 3
PED 238 Fitness Assessmentand Exercise Programming3
PED 239 Exercise and Sport Nutrition ..... 3
PED 240 Busn Mngmt for the Fitness Profess ..... 3
PED 242 Lifestyle Wellness Coaching ..... 215
Electives ..... 5
Select electives from the courses listed.
BUS100 Introduction to Business ..... 3
MKT 200 Principles of Marketing. ..... 3
MKT 210 Principles of Selling ..... 3
BIO 262 Neuro-musculoskeletal Systems ..... 3
BIO 270 Anatomy and Physiology I ..... 4
BIO 272 Anatomy and Physiology II .....  4
PROGRAM TOTAL ..... 60

* Take the Certified Personal Trainer exam and the Certified Group Exercise Instructor exam through American College of Sports Medicine after completion of all courses.


## JobTitles

- Personal Trainer
- Group Exercise Instructor
- Fitness Instructor
- Program Director


## About the Occupation

Fitness professionals work with clients to develop an individualized exercise and health program and train them during exercise sessions. Fitness professionals design and implement exercise programs for healthy individuals, as well as individuals with controlled disease. They lead health and fitness programs in a variety of settings including fitness facilities, universities/colleges, businesses and community centers.

## Highlights of Waubonsee's Program

- Students can complete their internship requirement on-campus at the college's newly remodeled Total Fitness Center or off-campus at a variety of health and fitness facilities.


## Professional

Certification Opportunities

- Certified Personal Trainer (CPT) Degree and certificate students who complete all courses are encouraged to take the exam for this certification from the American College of Sports Medicine (ACSM).
- Certified Group Exercise Instructor (GEI) - Degree and certificate students who complete all courses are also encouraged to take the exam for this certification from the American College of Sports Medicine (ACSM).

Career Education

## Kinesiology

## Certificate of Achievement

(442B) major code
This certificate will prepare the graduate to deliver a variety of exercise assessment, training, risk factor identification and lifestyle management services to individuals with or at risk for cardiovascular, metabolic or pulmonary diseases.

## Course Requirements

```
BIO }260\mathrm{ Human Structure and Function.4
```

HED 100 Personal Wellness ..... 3PED 209 Introduction to Exercise
Science and Sports Professions ..... 3
PED 205 Scientific Foundations of Human Movement ..... 3
PED 211 First Aid and Emergency Care. ..... 3
PED 234 Group Exercise Instruction ..... 2
PED 236 Exercise for Special Populations ..... 3
PED 237 Strength and Conditioning Principles ..... 3
PED 238 Fitness Assessment and Exercise Programming ..... 3
PED 239 Exercise and Sport Nutrition ..... 3
PED 240 Business Management for the Fitness Professional ..... 3
ITS 297 Internship ..... 1
or
ITS 298 Internship ..... 2 ..... 2
PROGRAM TOTAL ..... 34-35

* Take the Certified Personal Trainer exam and the CertifiedGroup Exercise Instructor exam through the AmericanCollege of Sports Medicine after completion of all courses.


## Laboratory Technology

## Laboratory Technology <br> Associate in Applied Science Degree (845A) major code

The Laboratory Technology Program prepares students for entry-level employment in a variety of non-medical laboratory settings. Through hands-on laboratory work, students gain valuable knowledge, skills and experience in laboratory techniques such as testing food flavors and environmental procedures.
General Education Requirements ..... 15
ENG 101 or 152 English ..... 3
ENG 102 or 153 English ..... 3
MTH 129 or 131 Mathematics. ..... 4
Humanities/Fine Arts/Languages coursePHL105 recommended3
Social and Behavioral Sciences elective;
ECN100 or PSY100 recommended ..... 3
Laboratory Technology
Major Program Requirements ..... 25
CHM 202 Biochemistry ..... 3
CIS 110 Business Information Systems ..... 3
LBT 100 Laboratory Safety orsubstitution with consent of instructor ...
LBT 101 Fundamentals of Laboratory Technology. 2
LBT 221 Lab Applications of Microbiology ..... 4
LBT 251 Lab Instruments I ..... 3
LBT 252 Lab Instruments II ..... 3
LBT 260 Environmental Labs ..... 2
LBT 270 Food Analysis Labs .....  2
LBT 280 Current Issues in Chemical Labs ..... 2
Electives ..... 20Select electives from the discipline and courses listed:Biology (BIO), Chemistry (CHM), Earth Science (ESC), Physics (PHY),Spanish (SPN), COM 121 Communications in the Workplace, LaboratoryTechnology Internships ITS 297 (1 credit hour), ITS 298 (2 credit hours) and ITS299 (3 credit hours).
PROGRAMTOTAL60

## JobTitles

- Chemical Lab Assistant
- Chemical Lab Technician
- Biology Lab Assistant
- Biology Lab Technician
- Quality Control Technician
- Process Control Technician


## About the Occupation

Laboratory technicians use specialized instruments and techniques to assist scientists in conducting experiments, researching and developing new products, performing quality tests, and producing a chemical or biological product. Technicians work in a variety of industries including agriculture, consumer and environmental protection, food processing, manufacturing, and pharmaceuticals.

## Highlights of Waubonsee's Program

- Students learn the techniques, processes and procedures of industrial laboratories through hands-on laboratory experiences designed to simulate tasks in the workplace.
- Internships provide students a workbased learning opportunity for their resume.
- The LBT program was developed with a Trade Adjustment Assistance Community College and Career Training grant from the Department of Labor.

Career Education

## Laboratory Technology

## Certificate of Achievement

(847B) major code
The Laboratory Technology Certificate of Achievement prepares graduates for employment as laboratory assistants with duties such as solution preparation, sample collection, basic analysis and inventory control of supplies, chemicals, and samples.

| Course Requirements |  |  |
| :---: | :---: | :---: |
| LBT | 100 | Laboratory Safety or substitution with consent of instructor ... 1 |
| LBT | 101 | Fundamentals of |
|  |  | Laboratory Technology.......................... 2 |
| LBT | 251 | Lab Instruments I ................................ 3 |
| LBT | 252 | Lab Instruments II ................................ 3 |
| LBT | 221 | Lab Applications of Microbiology ........... 4 |
| LBT | 260 | Environmental Labs.............................. 2 |
|  |  | or |
| LBT | 270 | Food Analysis Labs............................... 2 |
|  |  | or |
| LBT | 280 | Current Issues in Chemical Labs............ 2 |

PROGRAM TOTAL 15

# Legal Interpreting 

## Legal Interpreting: English/Spanish Certificate of Achievement <br> (621C) major code

Legal interpreting is a certificate of achievement that provides English/Spanish bilingual individuals the knowledge and skills to interpret successfully in legal settings. Students learn the procedures and processes of the American justice system, specialized legal vocabulary, and the legal interpreter's code of ethics and standards. Students also receive targeted practice with the three modes of legal interpreting: consecutive, simultaneous and sight translation.

Structured written and oral screening tests are conducted to determine proficiency in both English and Spanish. Students must be 18 years of age or older at the time of assignment to a practicum site.

## Course Requirements

CRJ 120 The American Court System ............................. 3
LGI 100 Introduction to Legal Interpreting: English/Spanish ............................. 3
LGI 105 Legal System and Terminology: English/Spanish............................ 3
LGI 110 Legal Interpreting: Simultaneous, Consecutive and Sight: English/Spanish .......... 3
LGI 120 Introduction to Legal Translation: English/Spanish ............................. 3
LGI 290 Legal Interpreting Seminar and Field Experience: English/Spanish .......... 1.5

PROGRAM TOTAL 16.5

## Job Titles

- Legal Interpreter


## About the Occupation

Legal interpreters are bilingual individuals who interpret in legal settings for persons whose primary language is not English. For those involved in a legal proceeding, communication is vital, and legal interpreters ensure justice is served by bridging language barriers.

The Legal Interpreting Certificate provides opportunities for each student to develop knowledge, practice skills, and receive exposure to the justice system. This program is built upon the belief that exemplary interpreters ought to be exceptionally knowledgeable in all the realms of the judicial system, possess a sound comprehension of ethics and legal vocabulary, demonstrate the ability to accurately interpret with an effective rendition of cultural nuances, and show a willingness to polish and develop critical interpreting skills through professional development activities.

## Highlights of Waubonsee's Program

- This program is designed to prepare the student to take the Administrative Office of the Illinois Courts (AOIC) state certification.
- This legal interpreting program is the only one of its kind in the region. This program targets bilingual (English/ Spanish) individuals who seek entrylevel training and skills, as well as working interpreters who need more formal training. Entry-level wages are significantly above the minimum wage, and with experience, provide middleclass income.
- The Bureau of Labor Statistics (BLS) projects the interpreters and translators occupation to grow faster than the average through 2022. The BLS projects this occupation to grow by 35 percent in years to come.


## Sound Interesting?

Students interested in this program may also be interested in Health Care Interpreting; see page 113.

## Machine Tool Technology

## JobTitles

- CNC Operator
- CNC Programmer
- Machine Operator
- Precision Inspector


## About the Occupation

Careers in advanced manufacturing offer exciting opportunities in designing and improving products, operating high-tech tools and machinery, analyzing problems and coming up with creative solutions, and working with both your hands and your mind. Manufacturing jobs are defined by the U.S. Census Bureau as those that create new products either directly from raw materials or from components. U.S. manufacturing workers are the most productive in the world, thanks to increased use of computers, robotics and efficient processes.

This certificate provides the fundamental skills necessary to install, maintain and service residential and light commercial systems.

## Highlights of Waubonsee's Program

- Latest software including AutoCAD Design Suite, SolidWorks, Mastercam, Esprit
- Solid preparation for external credentials from organizations such as National Institute for Metalworking Skills (NIMS), the Occupational Health and Safety Administration (OSHA), and the Manufacturing Skills Standards Council (MSSC)
- Stackable certificates designed to prepare you for the workforce


## Advanced Manufacturing

 Technology AwardsIL Skills USA
2nd place: 2015

## Advanced Manufacturing Technology Associate in Applied Science Degree (840A) major code

The Machine Tool Technology Program provides students hands-on experiences with manual machining, CNC lathe and mill programming and operations, print reading and metrology.

```General Education Requirements15
```

COM 100 or 121 Communication. ..... 3
ENG 101 or 152 English ..... 3
ENG 102 or 153 English ..... 3
Mathematics elective • ..... 3
Social and Behaviora
Sciences elective • ..... 3
Core Program Requirements ..... 19
AMT 100 Intro to Mfg Automation Systems. ..... 3
CIS 110 Business Information Systems .....  3
EGR 101 Engineering Graphics ..... 3
MTT 100 Safety Principles ..... 1
MTT 102 Manual Machine Shop Operations ..... 3
MTT 106 Computer Integrated Manufacturing ..... 3
MTT 110 Print Reading for the Trades ..... 3
Major Program Requirements ..... 19
MTT 111 Metrology/Mechanical Inspection ..... 2
MTT 112 Properties of Materials ..... 3
MTT 120 Introduction to Computer Numerical Control ..... 2
MTT 125 CNC Mill Operations and Programming ..... 3
MTT 126 CNC Lathe Operations and Programming. ..... 3
MTT 200 Advanced CNC Programming. ..... 3
MTT 202 Job Shop Processes. ..... 3
Electives ..... 7
Select electives from: Auto Body Repair (ABR), Automation Technology (AMT),

```Automotive Technology (AUT), Business Administration (BUS), Computer AidedDesign and Drafting (CAD), Computer Information Systems (CIS), ConstructionManagement (CMT), Electronics Technology (ELT), Engineering (EGR), Heating,Ventilation and Air Conditioning (HVA), Industrial Technology (IDT), Internship (ITS),Machine Tool Technology (MTT), Welding Technology (WLD).
```

PROGRAM TOTAL60

- See course choices listed on pages 72-73.


## CNC Operator

## Certificate of Achievement

(843B) major code
This program will provide students with the skills to set up, program and operate computerized numeric control (CNC) automated machines.

## Course Requirements

MTH 103 Technical Mathematics........................... 3
MTT 100 Safety Principles..................................... 1
MTT 102 Manual Machine Shop Operations ......... 3
MTT 110 Print Reading for the Trades .................... 3
MTT 111 Metrology/Mechanical Inspection .......... 2
MTT 120 Introduction to Computer Numerical Control 2
MTT 125 CNC Mill Operations and Programming..3

MTT 126 CNC Lathe Operations
and Programming
3
PROGRAM TOTAL ..... 20

## CNC Programmer

## Certificate of Achievement

## (844B) major code

This certificate is designed to provide students with the knowledge to write programs to machine parts using CNC mills and CNC lathes. Students also learn to program CNC machines using computer aided machining (CAM) software.

## Course Requirements

MTH 103 Technical Mathematics. ..... 3
MTT 100 Safety Principles. ..... 1
MTT 102 Manual Machine Shop Operations. ..... 3
MTT 110 Print Reading for the Trades ..... 3
MTT 120 Introduction to Computer Numerical Control ..... 2
MTT 125 CNC Mill Operations and Programming. ..... 3
MTT 126 CNC Lathe Operations and Programming ..... 3
MTT 200 Advanced CNC Programming. ..... 3
MTT 202 Job Shop Processes. ..... 3
PROGRAM TOTAL ..... 24

## Conceptualize.

## Innovate.

## Greate.

Manufacture.

Manufacturing Technology at Waubonsee Community College inc/udes: Automation, Advanced Manufacturing, Computer Aided Design (CAD) and Welding Technology. Students will practice skills on the state-of-the-art machines, including Computer Numerical Control (CNC) lathes and milling machines, while additional laboratories provide valuable experience learning to install, maintain, operate and service all types of automated systems and using AutoCAD software and computer aided manufacturing using Mastercam and Esprit software. Students can also learn a variety of welding processes to meet the challenges of advanced technology and new materials.

Using a combination of student's own imagination and the latest technology, they'll solve problems and create better products for the future. And because the field is so diverse, it provides unlimited opportunities for people of all personalities and education levels.

Students can prepare for a career in modern manufacturing by earning a degree or certificate at Waubonsee. Our program has strong ties to the real world of work due to our experienced faculty members and our support of the National Association of Manufacturers endorsed Stackable Certification System. This system aligns industry-validated credentials from such organizations as the Manufacturing Skill Standards Council (MSSC), National Institute for Metalworking Skills (NIMS) and the Occupational Health and Safety Administration (OSHA) with academic programs and occupations in all manufacturing sectors.

Students can earn a certificate or a degree in one or more of the manufacturing technology programs to meet the demands of employers in modern manufacturing who are specifically looking to hire multi-skilled technicians into new and up-to-date operations.

## Management: Human Resources

## JobTitles

- Employee Trainer
- HR Assistant
- Employee Benefit Coordinator


## About the Occupation

Human Resource professionals are needed in every business to plan, organize, lead, and direct its major functions toward organizational goals and serve as a link between management and employees. They help management make effective use of employees' skills, and help employees find satisfaction in their jobs and working conditions.

## Highlights of Waubonsee's Program

- As in all of Waubonsee's business programs, management students are encouraged to complete an internship to gain both college credit and valuable on-the-job experience.
- Waubonsee Community College is accredited by Alpha Beta Gamma International Business Honor Society to initiate members into the honor society for business and related professional disciplines. For additional information about the society, visit www.abg.org.


## Professional Association

 Opportunities- Society for Human Resource Management (SHRM) - This national organization is committed to advancing the HR profession. Student membership is available. Visit www.shrm.org.
- American Management Association (AMA) - This international organization is dedicated to building management excellence. Student membership is available. Visit www.amanet.org.


## Human

## Resources Management

## Associate in Applied Science Degree (131B) major code

This degree program provides students with core business principles and skills to plan, lead and organize in a human relations and personnel environment.
General Education Requirements ..... 15
COM 121 or 100 Communications. ..... 3
ENG 101 or 152 English ..... 3
ENG 102 or 153 English ..... 3
Economics elective• .....  3
Mathematics elective - ..... 3
Human Resources Management
Major Program Requirements ..... 33
ACC 101 or 202 Accounting ..... 3
ACC 125 or 203 Accounting. ..... 3
BUS 100 Introduction to Business .....  3
BUS 210 or 211 Business Law. ..... 3
BUS 220 Leadership in Business ..... 3
BUS 225 Organizational Behavior ..... 3
Systems ..... 3
CIS 112 Comprehensive Excel Spreadsheet ..... 3
MGT 215 Human Resources Management I ..... 3
MGT 220 Human Resources Management II ..... 3
Electives ..... 12
Select electives from: Accounting (ACC), Business Administration (BUS)
Computer Information Systems (CIS), Construction Management (CMT),
Marketing (MKT), Real Estate (REL), World Wide Web (WEB) ..... 60

- See course choices listed on pages 72-73.


# Mass Communication 

## Mass Communication

## Associate in Applied Science Degree (970B) major code

This degree is intended for individuals interested in working in the fields of television, film, Internet and/or radio broadcasting as announcers, radio/TV producers, camera operators and directors. The program utilizes Waubonsee's television studio in preparing students for this medium.

Although the intent of this degree program is occupational, many courses within the program are individually articulated with four-year colleges offering radio/TV programs to facilitate continued study at a four-year institution. Courses are aligned with IAI courses when possible.
General Education Requirements ..... 18
COM 100 Fundamentals of Speech Communication ..... 3
ENG 101 or 152 English ..... 3
ENG 102 or 153 English ..... 3
PSY 100 Introduction to Psychology ..... 3
Humanities/Fine Arts elective • ..... 3
Mathematics or Science elective • ..... 3
Mass CommunicationMajor Program Requirements.27
ITS 297 or 298 or 299
Internship ..... 3
MCM 130 Introduction to Mass Communication ..... 3
MCM 140 Television and Media Production I ..... 3
MCM 201 Broadcast Writing ..... 3
MCM 205 Basic Broadcast Announcing ..... 3
MCM 211 Introduction to Radio Production. ..... 3
MCM 215 Basic News Writing ..... 3
MCM 245 Mass Media Ethics and Laws ..... 3
MCM 280 Mass Communication Capstone:
The Business, Media and Careers of TV/Internet/Radio/Film ..... 3
Electives ..... 15
Select electives from the courses listed.
COM 110 Voice and Diction. ..... 3
COM 115 Digital Communication ..... 3
COM 121 Communication in the Workplace ..... 3
COM 135 Introduction to Integrated Marketing Communications ..... 3
COM 150 Intercultural Communication ..... 3
COM 200 Advanced Speech Communication ..... 3
MCM 240 Television and Media Production II ..... 3

## JobTitles

- Camera Operator
- TV/Radio Production Staff
- TV/Radio Program Host
- Audio/Video Editor
- Producer/Director
- Internet/Multimedia Specialist


## About the Occupation

The mass communication field provides a vast opportunity for individuals to learn the skills and techniques necessary to produce, direct or support television, film, radio and Internet productions. Technical positions in this field can go from the broad-based to the more highly specialized, and include camera operators, a wide variety of production staff positions, "on-air personalities," audio and video editors, producers, directors and Internet producers. Knowledge and experience in a variety of aspects in audio, video and Internet media production offer students an opportunity for employment in many venues and allow the student to move as the needs of the field shift.

## Highlights of Waubonsee's Program

- Students gain hands-on experience creating shows in the college's own television studio, located in Collins Hall.


## (continued on next page)

MCM 296 Special Topics/
Mass Communication ..... 1-3
MUS 110 Music Careers ..... 2
MUS 211 Introduction to the Recording Studio .....  3
MUS 213 Advanced Studio Recording ..... 3
THE 110 The Art of Oral Interpretation ..... 3
PROGRAM TOTAL ..... 60

## Mass Communication

## Certificate of Achievement

(972B) major code
This certificate is intended for individuals interested in working in the fields of television and/or film as announcers, TV producers, camera operators, directors and related occupations. The program utilizes Waubonsee's television studio in preparing students for these media.

| Course Requirements |  |
| :--- | :--- |
| ITS 297 | or 298 or 299 |
| Internship ........................................... 1-3 |  |
| MCM 130 | Introduction to Mass Communication.... 3 |
| MCM 140 | Television and Media Production I........... 3 |
| MCM 201 | Broadcast Writing ............................... 3 |
| MCM 205 | Basic Broadcast Announcing................ 3 |
| MCM 240 | Television and Media Production II <br> or |
| MCM 243 | Film Production ........................................ 3 |

PROGRAM TOTAL 16

# Medical Assistant 

## Medical Assistant

## Certificate of Achievement

## (422A) major code

This certificate program prepares individuals for employment in the administrative and clinical areas of medical offices, clinics, and other health care agencies. The Waubonsee Community College Medical Assistant Program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP), on recommendation of the Medical Assisting Education Review Board (MAERB).

CAAHEP - Commission on Accreditation of Allied Health Education Programs 25400 U.S. Highway 19 North, Suite 158, Clearwater, FL 33763
(727) 210-2350 Phone
(727) 210-2354 Fax
www.caahep.org
MAERB - Medical Assisting Education Review Board
20 N. Wacker Drive, Suite 1575
Chicago, IL 60606
(800) 228-2262 Phone
(312) 899-1259 Fax
www.maerb.com
Graduates of the program who meet CAAHEP requirements are eligible to take the national certification exam for Certified Medical Assistants, CMA. Students who are able to meet American Society of Clinical Pathologists (ASCP) requirements will be eligible to take the national certification exam for Phlebotomy Technician, PBT (ASCP).

NOTE: This sequence is intended for full-time students in the medical assistant program. Students interested in a part-time program option should contact the Dean for Health Professions and Public Service for scheduling options (see directory).
Summer Semester ..... 10
m HIT 105 Medical Terms for Health Occupations....
m MLA 220 Pharmacology/Med.Assist. ..................... 2
m PSY 100 Introduction to Psychology....................... 3
Fall Semester .............................................................. 12.5
m CIS 110 Business Information Systems ............... 3
m MLA 150 Basic Administrative Procedures for the Medical Assistant.. .3
m MLA 171 Medical Assistant Clinical I .................. 2.5
m MLA 230 Medical Law and Ethics .......................... 1
m PSY 205 Life-Span Psychology .............................. 3

Job Title

- Medical Assistant


## About the Occupation

Medical assistants perform routine administrative, clinical and laboratory tasks to keep medical offices, clinics, laboratories and other health care agencies running smoothly.

## Highlights of Waubonsee's Program

- Students may choose to complete the program in four semesters (full-time) or six semesters (part-time).
- The required externship allows students to gain experience at a local physician's office, clinic or outpatient facility.


## Professional Certification Opportunities

- Certified Medical Assistant (CMA) - Graduates who meet certain requirements are eligible to take this national certification exam from the American Association of Medical Assistants (AAMA).
- Phlebotomy Technician (PBT) Students who meet certain requirements will be eligible to take this national certification exam from the American Society of Clinical Pathologists (ASCP).

Career Education
Degrees and Certificates

| Spring Semester.......................................................................... 2 |  |  |  |
| :--- | :--- | :--- | :---: |

Summer Semester ................................................... 2
m MLA 298 Medical Assistant Externship ................. 2
PROGRAM TOTAL
Veterans or military members eligible for education benefits should see Programs with Special Admission Applications, page 228.
m Major course requires minimum grade of C.

## Procedure for Entering the Medical Assistant Program

The medical assistant program is offered in either an accelerated (four semester) or part-time (six semester) sequence. Students seeking admission to the medical assistant program are required to:

1. Meet with Counseling (see directory) to establish a schedule for taking program courses.
2. Obtain specific admission information by contacting the Dean for Health Professions and Public Service (see directory).
3. Complete the special application required for entry into the program, which is available in the Health Professions and Public Service office, the Counseling, Advising and Transfer Center or on the Internet at www.waubonsee.edu/ healthcareers. Enrollment in the medical assistant (MLA) courses is limited in order to provide the best possible educational experience for students. Students interested in the accelerated sequence and desiring to take courses with the MLA prefix in the summer must make application by April 1. Students interested in the part-time sequence and desiring to take courses with the MLA prefix in the fall must make application by July 1 .
4. Complete required Pre-Admission Exam (PAX).

Note: Acceptance into the program is based on assessment results, with documentation of verbal, math and science of 50 percent for the PAX, as well as a composite of 60 percent for the PAX. A student has two opportunities to successfully meet assessment requirements. Eight weeks must elapse between testing sessions for the PAX assessment.
5. Understand that the medical assistant application, previous transcripts, and program assessment testing in math and reading are required for admission to the program. Students are notified via mail approximately three weeks after the application deadline date as to selection status.
It is the responsibility of the applicant to make sure the following required documents are received by Registration and Records: WCC New Student Information Form; high school transcript or high school equivalency certificate; transcripts from other colleges or vocational schools attended.
6. Follow the program sequence once a student is accepted into the program. The student is expected to follow either the accelerated or part-time program sequence for all MLA courses. Students may opt to complete any or all of the CIS, BIO, COM, HIT or PSY courses prior to submitting an application to the medical assistant program.
For continuation in the medical assistant program, a 2.0 or better GPA must be received in each of the major courses. Please contact the offices of Health Professions and Public Service for specific course information.
7. Submit documentation of a physical examination, immunizations and 2-step tuberculosis (TB) test upon acceptance into the accelerated program, and prior to the start of MLA 171 Medical Assistant Clinical I for students accepted into the part-time program.
8. Science courses taken more than five years before the application deadline must be retaken. There are no exceptions.

## Program Costs

In addition to tuition and regular fees, the medical assistant student has the following minimum fees and expenses:
Textbooks for MLA classes
(excludes general education courses).......................... \$120
Uniform/white shoes ....................................................... $\$ 70$
Stethoscope ............................................................. \$15
Physical exam, immunizations,
TB testing ............................. per health care provider
Total Estimated Costs
(excluding medical requirements). . $\$ 205$

NOTE: These fees and expenses are approximate costs and are subject to change without prior notice to the student.

## Advanced Placement

Applicants who wish to transfer medical assistant courses from another college or vocational school to Waubonsee may be considered for advanced placement. Advanced placement applications are considered on an individual basis and require that specific documentation (e.g. transcripts, course descriptions) be submitted along with the medical assistant application.

This program does not grant credit for life or work experience.

## Audio Production Technology Certificate of Achievement <br> (986A) major code

This certificate is intended for individuals interested in working in the field of electronic music production in a variety of venues including radio, television, recording studios, internet broadcasting and live sound reinforcement. Using a variety of software audio applications, students gain knowledge and practice in digital audio recording and editing, digital sampling, audio mixing console operations, fundamentals in electronics and fundamentals of music theory. Students also gain experience in small entrepreneurial endeavors to be applied in music business practices.
Course Requirements
MCM 130 Introduction to Mass Communication. ..... 3
MUS 211 Introduction to the Recording Studio ..... 3
MUS 213 Advanced Studio Recording ..... 3
MUS 215 Electronics for Audio Production ..... 3
BUS 140 Introduction to Entrepreneurship (3)or
MUS 110 Careers in Music (2) ..... 2-3
MUS 120 Basic Elements of Music (3)or
MUS 121 Theory of Music I (4) ..... 3-4
PROGRAM TOTAL ..... 17

## Job Titles

- Radio Operator
- Broadcast Technician
- TV/Radio Announcer
- Audio/Video Equipment Technician
- Producer/Director
- Sound Engineering Technician
- Media and Communications Equipment Workers


## About the Occupation

Professionals in this field use a variety of equipment, processes and techniques to capture, create, edit and mix sound and/or music. They combine a general knowledge of acoustics with more specialized knowledge about electronics and recording software. Job opportunities exist in radio, TV and recording studios, as well as at live entertainment venues.

Highlights of Waubonsee's Program

- With a deeper and more narrowed focus than a general mass communication program, this certificate is unique within the Illinois community college system.
- Students use Waubonsee's recording studio/lab to produce class projects.
- For those students wanting to start their own businesses, an entrepreneurship course is included as an option in the program.


## Nurse Assistant

JobTitle

- Certified Nurse Assistant (CNA)


## About the Occupation

Certified nurse assistants are valued members of the health care team, working in acute and long-term care settings.

A certified nurse assistant career is rewarding for compassionate individuals who enjoy caring for people. The job may be demanding, but CNAs can receive a sense of satisfaction from helping patients feel comfortable and loved. CNAs spend a lot of time with patients and have the opportunity to develop close relationships with them.

A student who wants to pursue a career in health care should have a sincere desire to work with people and be empathetic to the needs of others. Nurse assistants receive satisfaction from knowing their work contributes to the well-being of others.

Highlights of Waubonsee's Program

- Certified nurse assistant status may serve as a springboard for a variety of careers within the health care field, such as phlebotomy technician, medical assistant, massage therapist or registered nurse.
- Waubonsee Community College's pass rate on the Illinois Nurse Aide Competency Exam from January 1, 2016 through December 31, 2016 was 91\%.


## Basic Nurse Assistant Training Certificate of Achievement (427A) major code

Graduates of this program have the competencies to work as nurse assistants in hospitals and long-term care facilities and for home health agencies. The program is approved by the Illinois Department of Public Health (IDPH) and meets the requirements of the Nursing Home Reform Act of 1979.

Students are eligible to take the State of Illinois Nurse Assistant/Nurse Aide Competency Examination after successful completion of this course.

## Course Requirements

m NAS 101 Basic Nurse Assistant Training................. 7
PROGRAM TOTAL ............................................................... 7
m Major course requires a minimum grade of $C$.

## Procedure for Entering Basic Nurse Assistant Training

Students seeking admission to the basic nurse assistant training program are required to:

1. Attend a mandatory orientation and fingerprint session prior to registering.
2. The ability to register for the program is based on assessment results, with documentation of reading skills at an 8th grade level. Students should contact Learning Assessment and Testing Services (see directory) for details.
3. Be at least 16 years of age or older.
4. Submit required documentation of a 2 -step tuberculosis (TB) test prior to entering the clinical experience.
5. Pass the 21 manual skills mandated by IDPH.
6. Attend the required number of hours mandated by the Illinois Department of Public Health IDPH. Any student who does not meet these IDPH attendance requirements will be withdrawn from NAS 101, without exception.
7. Present a valid social security number at the time of enrollment in NAS101.

Certification testing will be arranged and documentation of course completion will be submitted to the IDPH by the college.

## (continued on next page)

## Program Costs

In addition to tuition and regular fees, the nurse assistant student has the following minimum fees and expenses:
Textbooks ............................................................................... \$150
Uniform/shoes .......................................................................... $\$ 43$
Name Badge ............................................................................ $\$ 4$
Supplies (e.g. gait belt) ............................................................... $\$ 9$
Immunizations, TB testing ........................ per health care provider
Total Estimated Costs
(excluding medical requirements): \$206

In addition, students are responsible for personal transportation to required clinical experiences.

NOTE: These fees and expenses are approximate costs and are subject to change without prior notice to the student.

## Paraprofessional Educator

## JobTitles

- Paraprofessional Educators
- Parapros
- Paraeducators
- Classroom Teacher Assistants
- Special Education Teacher Assistants
- Clerical/Support Staff Assistants
- Computer Laboratory Assistants
- Library/Media Center Assistants
- Bilingual Teacher Assistants


## About the Occupation

Employment options and job responsibilities for paraprofessional educators vary widely. Some paraeducators exclusively perform noninstructional or clerical duties, such as working in the main office, monitoring playgrounds or hallways, or supervising lunchrooms or field trips. Many paraprofessional educators in the general classroom, however, provide a combination of instructional and clerical tasks. They may reinforce instruction by working with students individually or in small groups. Paraeducators may be asked to help prepare the classroom by setting up/maintaining media equipment, ordering supplies, or creating bulletin boards and displays. Paraeducators may assist teachers with grading, typing, filing, duplicating, maintaining health and attendance records, and collecting money. A teacher may require a paraprofessional educator to research a topic and assemble materials to be used in a particular instructional unit.

## Highlights of Waubonsee's Program

- Because of the important role it plays in today's educational environment, technology is emphasized throughout the paraprofessional curricula. Students create an electronic portfolio to aid them in their job search and take a technology in education course where they learn to do Web research, develop a Web page and work with digital cameras and scanners.


## Paraprofessional Educator <br> Associate in Applied Science Degree (590A) major code

This degree offers students a wide range of educational experiences and prepares them to assist classroom teachers at all levels of the K-12 educational system. Students who complete this degree meet the requirements for paraprofessional educators established by the No Child Left Behind legislation.
General Education Requirements ..... 15
COM 100 Fundamentals of Speech Communication ..... 3
ENG 101 First-Year Composition I .....  3
ENG 102 First-Year Composition II ..... 3
PSY 100 Introduction to Psychology ..... 3
MTH 201 Math for Elementary Teachers I ..... 3
Paraprofessional Educator
Major Program Requirements. ..... 33
DIS 101 Disability in Society ..... 3
ECE 115 Child Growth/DevelopmentPSY 220 Child Psychologyor
PSY 226 Adolescent Psychology ..... 3
ECE 120 Health, Safety, and Nutrition ..... 3
EDU 100 Strategies for the Paraprofessional Educator ..... 3
EDU 200 Introduction to Education ..... 3
EDU 202 Clinical Experience in Education ..... 3
EDU 205 Introduction
to Technology in Education ..... 3
EDU 210 Educational Psychology ..... 3
EDU 220 Introduction to Special Education ..... 3
MTH 202 Math for Elementary Teachers II. ..... 3
PED 211 First Aid and Emergency Care. ..... 3
Electives and Emphasis Areas12
Students wanting to specialize in a particular paraprofessional educator areashould select electives from one emphasis area; students wanting a more generalapproach can select any electives from the categories listed.

## Content Specialist Emphasis

Students should select courses related to their content area from sections B, C, and $D$ of the Associate in Applied Science degree (see pages 72-73).

## (continued on next page)

Disability Studies EmphasisDIS 110 Perspectives on Disability
$\qquad$3
Early Childhood Education Specialist Emphasis
ECE 101 Introduction to EarlyChildhood Education3
ECE 106 Guiding Young Children ..... 3
ECE 107 Development and Guidance of the School-Age Child ..... 3
ECE 125 Child, Family and Community ..... 3
ECE 130 Observation and Assessment ..... 2
ECE 207 School-Age Programming. ..... 3
Support Specialist Emphasis
Select courses from: Computer Information Systems (CIS)
Electives
Electives may be selected from the courses listed.
EDU 296 Topics/Issues for Education ..... 1-3
HSV 120 Introduction to Substance Abuse ..... 3
MUS 210 Music for Elementary Teachers ..... 3
SGN 101 American Sign Language I ..... 3
SGN 102 American Sign Language II ..... 3
SPN 101 Elementary Spanish I ..... 3
SPN 102 Elementary Spanish II ..... 3
SPN 110 Survival Spanish I ..... 3
SPN 201 Intermediate Spanish I ..... 3
SPN 202 Intermediate Spanish II ..... 3
SPN 205 Spanish for Native Speakers ..... 3
SPN 211 Conversational Spanish ..... 3

PROGRAM TOTAL .............................................................. 60PROGRAM TOTAL60

## Paraprofessional Educator Certificate of Achievement (594A) major code

The core courses in this certificate provide students with a basic knowledge of the American educational system, an understanding of the roles and responsibilities of paraprofessional educators, and an opportunity to develop proficiency in assisting classroom teachers.

## Course Requirements

DIS 101 Disability in Society ..... 3
ECE 115 Child Growth and Developmentor
PSY 220 Child Psychology
or
PSY 226 Adolescent Psychology ..... 3
EDU 100 Strategies for Paraprofessional Educator ..... 3
EDU 200 Introduction to Education ..... 3
EDU 202 Clinical Experience in Education ..... 3
EDU 205 Introduction to Technology in Education ..... 3
EDU 210 Educational Psychology ..... 3
EDU 220 Introduction to Special Education. ..... 3
MTH 201 Math for Elementary Teachers ..... 3
PED 211 First Aid and Emergency Care ..... 3
PROGRAM TOTAL ..... 30 this program.

NOTE: Proficiency credit is limited to 20 semester hours for this program.

# Phlebotomy Technician 

JobTitle

- Phlebotomy Technician


## About the Occupation

Phlebotomy technicians (phlebotomists) are responsible for the collection, transport handling and processing of blood specimens for analysis.

## Highlights of Waubonsee's Program

- This program is 9 credit hours, allowing students a quick entry into or way to advance in the health care field.


## Professional <br> Certification Opportunities

- Phlebotomy Technician (PBT)
- Graduates who meet certain requirements will be eligible to take this national certification exam from the American Society of Clinical Pathologists (ASCP).


## Phlebotomy Technician Certificate of Achievement (435B) major code

The Phlebotomy Technician Certificate Program prepares students for all aspects of phlebotomy in a health care setting, including collection procedures, safety guidelines, patient rights, test requirements and equipment basics. Students will be able to accurately perform venous collection, explain the proper steps for collection, and identify the supplies needed for collection.

This program also provides a foundation for possible transition into other health care careers.

| Course Requirements |  |  |  |
| :---: | :---: | :---: | :---: |
| m | COM |  | Communication Strategies for Health Care Careers $\qquad$ |
| m | HIT | 105 | Medical Terms for |
|  |  |  | Health Care Occupations |
| m | PBT | 105 | Theoretical and Clinical Aspects |
|  |  |  | Phlebotomy |
| m | PBT | 297 | Phlebotomy Externship |

PROGRAM TOTAL
.9

## m Major course requires minimum grade of $C$.

## Procedure for Enrolling in Phlebotomy Technician (PBT) Courses

Previous or concurrent enrollment in COM 125, HIT 105, and program assessment testing in reading are required for enrollment in PBT courses. The ability to register for the program is based on assessment results, with documentation of reading skills at a 10th grade level. Students should contact Learning Assessment and Testing Services (see directory) for details.

For continuation in the phlebotomy technician program, a 2.0 or better GPA must be received in each of the major courses.
Current American Heart Association Basic Life Support (BLS) for Health Care Providers, completed health form, documented immunizations, and 2-step tuberculosis (TB) test are required prior to the start of PBT 297 Phlebotomy Externship. Each student is required to carry a personal health insurance policy. Proof of insurance is due by the fourth week of the 8-week PBT 105, Theoretical and Clinical Aspects of Phlebotomy course or by the seventh week of the 16 -week PBT 105, Theoretical and Clinical Aspects of Phlebotomy course.

## Program Costs

In addition to tuition and regular fees, the phlebotomy technician student has the following minimum fees and expenses:
Textbooks for PBT classes (excludes
general education courses)....................................................... \$100
BLS Certification ...................................................................... $\$ 45$
Uniform..................................................................................... $\$ 50$
Physical exam, immunizations,
TB testing $\qquad$ per health care provider

## Total Estimated Costs

(excluding medical requirements) \$195

NOTE: These fees and expenses are approximate costs and are subject to change without prior notice to the student.

## Photography

## Basic Digital Photography <br> Certificate of Achievement (905A) major code

This certificate is designed for students interested in advancing their traditional photographic skills into the digital arena. Whether for photo retouching or efficient file management for the Web, students will acquire skills in using image editing software, hardware and the peripherals relevant to the digital darkroom.

## Course Requirements

ART 135 Basic Digital Photography ..... 3
ART 142 Beginning Digital Photography ..... 3
ART 242 Intermediate Digital Photography. ..... 3
ART 243 Advanced Digital Photography ..... 3
PROGRAM TOTAL12
Comprehensive Photography Certificate of Achievement (907A) major code

This certificate program offers a sequence of courses that will enable students to assemble a professional portfolio of both traditional and digital images. The portfolio may be used for professional job searches.

## Course Requirements

ART 104 History of Photography ..... 3
ART 140 Photography I ..... 3
ART 142 Beginning Digital Photography ..... 3
ART 240 Photography II ..... 3
ART 241 Photographic Lighting ..... 3
ART 242 Intermediate Digital Photography. ..... 3
ART 243 Advanced Digital Photography ..... 3
ART 290 Studio Art ..... 3

JobTitles

- Photographer's Assistant
- Photographer
- Photographic Lab Technician
- Digital Image Specialist


## About the Occupation

Professional photographers are employed in a variety of settings. Studio photographers capture objects, individuals and set-ups in a controlled lighting environment. Documentary photographers record events as they occur. Commercial photographers capture images that may be used for personal broadcasting, as in weddings, or for public promotion of consumer items, as in advertisements.

## Highlights of Waubonsee's Program

- Waubonsee offers courses in both traditional and digital photographic techniques.
- In addition to using a traditional 35 mm camera, students also learn to use a $4 " \times 5$ " view camera, one of the most important tools in professional product and commercial photo studios.
- Camera check-out available for students.


## Real Estate

## JobTitles

- Real Estate Broker
- Real Estate Managing Broker
- Property and Real Estate Managers


## About the Occupation

Real estate agents help people buy or sell their home and base their assistance on a thorough knowledge of the housing market. These agents know local zoning, tax laws and financing. Real estate agents generally are independent contractors who provide their services to a licensed broker on a contract basis. Property managers perform an important function in increasing and maintaining the value of real estate investments. They can administer income-producing commercial and residential properties and/or plan and direct the purchase, development and disposal of real estate for business. Brokers not only sell real estate owned by others, but also rent and manage properties, perform market analyses and assist with developing new building projects.

Highlights of Waubonsee's Program

- Earn college credit and professional licensure at the same time.
- Learn from a team of experienced real estate professionals.
- Courses are available in both face-to-face and online formats.


## Professional

Certification Opportunities

- Illinois Real Estate Broker
- Illinois Real Estate Managing Broker


## Real Estate Broker Certificate of Achievement (165B) major code

The Real Estate Broker certificate prepares students for entry into the field. Upon successful completion of this certificate, students have met the pre-license requirements to be eligible for the Illinois Real Estate Broker Examination. All real estate brokers and managing brokers must be licensed by the State of Illinois to conduct transactions in Illinois.

## Requirements for the Illinois Real Estate Broker Examination:

- 21 years of age or older
- High school graduate or equivalent
- Successful completion of the 90 hours of Broker pre-license coursework
- Hold an original Uniform Real Estate Transcript (provided by WCC)


## Requirements for the IIlinois Real Estate Broker License:

- 21 years of age or older
- High school graduate or equivalent
- Successful completion of the 90 hours of Broker pre-license coursework
- Hold an original Uniform Real Estate Transcript (provided by WCC)
- Sponsorship by an Illinois licensed Managing Broker
- Successfully pass the Illinois Real Estate Broker Examination


## Requirements for the Waubonsee Community College Certificate of Achievement

- Complete REL 100 and 105


## Course Requirements

REL 100 Real Estate Broker Pre-License.............. 5
REL 105 Real Estate Broker Pre-License: Applied Principles ............... 1

PROGRAM TOTAL .6

## Real Estate Managing Broker Certificate of Achievement (168A) major code

The Managing Broker license is required by anyone wishing to manage a real estate office. This certificate meets the Illinois Real Estate License Act of 2000 as amended in 2010 and meets the educational requirements to sit for the Managing Broker license. Candidates must complete 165 hours of required education and have two, out of the last three, years experience as a licensed salesperson or broker.
Course Requirements
REL 100 Real Estate Broker Pre-License.............. 5
REL 105 Real Estate Broker
Pre-License: Applied Principles1

REL 115 Real Estate Broker Post-License ............ 1
REL 116 Real Estate Broker
Post-License: Applied Principles............. 1
REL 200 Real Estate Managing Broker Pre-License ................ 2
REL 205 Real Estate Managing Broker Pre-License: Applied Management and Supervision ...............

[^4]
## Registered Nursing

## JobTitle

- Registered Professional Nurse (RN)


## About the Occupation

Nurses use acquired skills, scientific knowledge and nursing expertise to assess, prioritize actions and assist the client to meet physical and psychological needs. Nurses assess and record clients' symptoms and response to treatment, administer medications, assist in convalescence and rehabilitation, instruct clients and families in proper care, and help individuals and groups take steps to improve or maintain health.

## Highlights of Waubonsee's ADN Program

- The Waubonsee Community College Associate Degree in Nursing Program is accredited by the Accreditation Commission for Education in Nursing (ACEN).


## Professional

Certification Opportunities

- Registered Professional Nurse (RN)
- Graduates are eligible to take the National Council of State Boards of Nursing Examination (NCLEX-RN).


## Nursing

## Associate in Applied Science Degree (430A) major code

The Associate Degree in Nursing (ADN) program prepares individuals to function as staff nurses in a variety of health care settings, including hospitals, nursing homes, and offices. Graduates of the program are eligible to take the National Council of State Boards of Nursing Examination (NCLEX-RN) which leads to licensure as a registered professional nurse (RN). The program is approved by the Illinois Department of Financial and Professional Regulation.
General Education Requirements ..... 27
m BIO 250 Microbiology. ..... 4
m BIO 270 Anatomy and Physiology I ..... 4
m BIO 272 Anatomy and Physiology II ..... 4
m COM 100 Fund. of Speech Communication ..... 3
m ENG 101 First-Year Composition I ..... 3
m ENG 102 First-Year Composition II ..... 3
m PSY 100 Introduction to Psychology ..... 3
m PSY 205 Life-Span Psychology ..... 3
Nursing Major Program Requirements ..... 41
m NUR 105 Introduction to Professional Nursing .....  5
m NUR 106 Introduction to ClinicalPharmacology for Nurses1
m NUR 120 Basic Concepts of Nursing ..... 5
m NUR 150 Concepts of Nursing I ..... 5
m NUR 175 Concepts of Mental Health Nursing ..... 5
m NUR 205 Concepts of Nursing II .....  5
m NUR 220 Nursing Concepts
of the Childbearing Family ..... 5
m NUR 250 Concepts of Nursing III ..... 5
m NUR 275 Advanced Concepts of Nursing ..... 5
PROGRAM TOTAL ..... 68

Veterans or military members eligible for education benefits should see Programs with Special Admission Applications, page 228.
$\mathrm{m} \quad$ Major course requires a minimum grade of $C$.

## Procedure for Entering the Nursing Program

Students seeking admission to the nursing program are required to:

1. Submit a completed New Student Information Form to Admissions.
2. Meet with Counseling to establish a schedule for taking prerequisite courses.
3. Obtain specific admission information by contacting the Health Care Programs Office, ext. 3901.
4. Complete required Test of Essential Academic Skills (TEAS). Note: Acceptance into the program is based on assessment results, with documentation of composite of 55 or above for the TEAS.
A student has two opportunities to successfully meet assessment requirements. Eight weeks must elapse between testing sessions for the TEAS assessment.
5. Complete and submit the nursing application required for entry into the program, along with a program application fee of $\$ 10$ (check or money order made out to Waubonsee Community College). The nursing program application form is available from the offices of Registration and Records, Counseling, and Health Care Programs, ext. 3901, or on the Internet at www. waubonsee.edu/healthcareers. Application to the program must be made prior to the deadline for the semester the student desires to enter:

- March 15 for fall semester (August/October). Note: Students will be required to verify residency at the time of application submission to the Registration and Records office. Applications will not be accepted without the residency verification documents.
- September 15 for spring semester (January/March).

Note: Students will be required to verify residency at the time of application submission to the Registration and Records office. Applications will not be accepted without the residency verification documents.
Enrollment is limited in the nursing (NUR) courses in order to provide the best possible educational experience for students. (Note: Selection for admission into the program for either August/October or January/March will be determined by the Admissions Committee. Applicants should anticipate acceptance for either start date for fall or spring semesters.)
6. Attain a cumulative GPA of 2.7 or higher for prerequisite courses.
7. Complete science courses within five years of application filing deadline. Science courses taken more than five years before the application deadline must be retaken. There are no exceptions.
8. Understand that all of the following documentation must be submitted in order to be considered for acceptance into the program:

- New Student Information Form;
- nursing program application (including \$10 non-refundable application fee);
- ORIGINAL residency documents (see \#11)
- successful completion of prerequisite courses or test results from any proficiency examinations (CLEP);
- nursing assessment entrance testing;
- transcripts from other colleges/universities.

9. Once accepted into the program, the student must:

- attend the mandatory new student orientation to the nursing program;
- submit documentation of a physical and dental examination, current immunizations, and a 2 -step tuberculosis (TB) test none of which should be more than one year old at the time of entry;
- follow the program sequence for all NUR courses;
- attain a $2.0(\mathrm{C})$ or better GPA in each of the nursing courses.

10. Official written notification of acceptance into the program will be received via certified mail. Students not accepted must reapply.
11. In compliance with the Illinois Community College Act, indistrict applicants will be given preference over out-of-district applicants. Proof of residency may be required. Contact Registration and Records for information regarding residency. Having paid in-district tuition rates in the past does not necessarily qualify an individual as an in-district resident.
12. Are you a veteran or military service member that has current eligibility for either federal VA Education benefits or Illinois military grants? Federal VA Education programs include: Chapter 30, 31, 33, 1606 and REAP. State grants are the Illinois Veterans Grant (IVG) or Illinois National Guard (ING).

If "yes" please attach a copy of your benefits Certificate of Eligibility to your application. Our office will confirm your benefit eligibility by contacting the Waubonsee Financial Aid Office's VA School Certifying Official.

## Advanced Placement

Licensed Practical Nurses (LPNs) may be eligible for advanced placement into the program, as well as students transferring from another nursing program. Applications will be reviewed on an individual basis. Contact the Health Care Programs Office, ext. 3901.
(continued on next page)

Career Education
Degrees and Certificates

## Program Costs

In addition to tuition and regular fees, the registered nursing student has the following minimum fees and expenses:
Textbooks/online tutorials for NUR classes

(excludes general education courses).
. 2,500

BLS certification......................................................................... $\$ 45$
Uniform/shoes ....................................................................... \$105
Nursing supplies (e.g. watch, stethoscope)............................ \$175
NCLEX-RN licensure exam fee ............................................... \$200
State of Illinois criminal background check fee ........................ $\$ 50$
Physical examination, immunizations,
TB testing.............................................. per health care provider
Total Estimated Costs
(excluding medical requirements): .\$3,075

In addition, students are responsible for personal transportation to required clinical experiences.

NOTE: These fees and expenses are approximate costs and are subject to change without prior notice to the student.

# Surgical Technology 

## Surgical Technology

## Certificate of Achievement

## (462A) major code

This certificate program prepares individuals for entry-level employment as surgical technologists. The program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) on recommendation of the Accreditation Review Council on Education in Surgical Technology and Surgical Assisting (ARC/STSA).

## Fall Semester

15BIO 250 Microbiology 4
BIO 260 Human Structure and Function................ 4
HIT 105 Medical Terms for Health Occupations.... 1
SUR 100 Principles of Surgical Tech. ...................... 4
SUR 110 Surgical Pharmacology ............................ 2
Spring Semester.125.5
m SUR 200 Health Problems and Surgical Procedures II .....  2
m SUR 201 Surgical Tech Externship II .....  3
m SUR 220 Seminar in Surgical Tech. ..... 0.5

Veterans or military members eligible for education benefits should see Programs with Special Admission Applications, page 228.
m Major course requires a minimum grade of C.

## JobTitle

- Certified Surgical Technologist (CST)


## About the Occupation

The surgical technologist assists in surgical procedures under the supervision of surgeons, anesthesiologists, registered nurses or other surgical personnel. Prior to each operation, the technologist positions surgical instruments and equipment, and ensures proper functioning. The technologist also aids patients by preparing incision sites, transporting patients to surgery, positioning and covering them with sterile drapes, and observing vital signs. During surgical procedures, technologists pass instruments and other sterile supplies to the surgeons and surgical team members, and may assist during procedures. They prepare specimens for laboratory analysis, apply dressings and transfer patients to post-anesthesia care.

The surgical technology certificate program provides a foundation for possible transition into other health care careers such as Certified First Assist (CFA) and Surgical Nurse.

## Highlights of Waubonsee's Program

- The Surgical Technology Program combines classroom instruction and clinical experience at affiliated health care agencies in the community.
Graduates are competent as entry-level technologists, qualified to provide services in surgical areas, sterile processing departments, ambulatory care and other facilities.


## Professional Certification Opportunities

- Certified Surgical Technologist (CST)
- Graduates are eligible to take this national certification exam offered by the National Board of Surgical Technology and Surgical Assisting (NBSTSA).


## Procedure for Entering the Surgical Technology Program

The Surgical Technology Program is offered in a full-time (three semester) sequence. Students seeking admission to the surgical technology program are required to:

1. Meet with Counseling (see directory) to establish a schedule for taking program courses.
2. Obtain specific admission information by contacting the Dean for Health Professions and Public Service (see directory).
3. Complete the special application required for entry into the program, which is available in the Health Professions and Public Service office, the Counseling, Advising and Transfer Center or on the Internet www.waubonsee.edu/healthcareers. Enrollment is limited in the surgical technology (SUR) courses in order to provide the best possible educational experience for students. Students desiring to take courses with the SUR prefix in the fall must make application by April 1.
4. Complete required Pre-Admission Exam-(PAX).

Note: Acceptance into the program is based on assessment results, with documentation of verbal, math and science of 50 percent for the PAX, as well as a composite of 60 percent for the PAX. A student has two opportunities to successfully meet assessment requirements. Eight weeks must elapse between testing sessions for the PAX assessment.
5. Understand that the surgical technology application, previous transcripts, and program assessment testing in math and reading are required for admission to the program. Students are notified via mail approximately four weeks after the application deadline date as to selection status.
6. Provide documentation of current American Heart Association BLS for Health Care Providers (CPR) certification. This certification must remain current for the entire length of the program.
7. Follow the program sequence once a student is accepted into the program. The student is expected to follow the program sequence for all SUR courses. Students may opt to complete any or all of the BIO, COM or HIT courses prior to submitting an application to the surgical technology program. For continuation in the surgical technology program, a 2.0 or better GPA must be received in each of the major courses. NOTE: SUR courses are offered on a limited basis during the year. Please contact the office of Health Professions and Public Service for specific course information.
8. Submit documentation of a physical examination, immunization, Hepatitis-B series, and 2-step tuberculosis (TB) test upon acceptance into the program.
9. Science courses taken more than five years before the application deadline must be retaken. There are no exceptions.

## Program Costs

In addition to tuition and regular fees, the surgical technology student has the following minimum fees and expenses:

Textbooks for SUR classes (excludes general
education courses) ........................................................ $\$ 400$
White shoes, lab coat, patch ..................................................... $\$ 75$
Stethoscope .......................................................................... \$15
Supplies .................................................................................... $\$ 20$
Physical exam, immunizations,
Hepatitis-B series, TB testing ............... per health care provider
Total Estimated Costs
(excluding medical requirements).......................................... \$510
NOTE: These fees and expenses are approximate costs and are subject to change without prior notice to the student.

# Therapeutic Massage 

## Therapeutic Massage <br> Certificate of Achievement <br> (472A) major code

The certificate program in Therapeutic Massage prepares the student to work in the wellness area of professional massage therapy with clients who seek massage for pleasure, relaxation and general health maintenance. Graduates are eligible to take the Massage and Bodywork Licensing Examination (MBLEx).
Program Prerequisite Courses ..... 6
$m$ BIO 260 Human Structure and Function* ..... 4
m HIT 105 Medical Termsfor Health Occupations ........................... 1
m TMS 100 Introduction to Therapeutic Massage ..... 1
Fall Semester ..... 13
m TMS 110 Professional Foundations of Therapeutic Massage ..... 2
m TMS 120 MassageTechniques I (First 8 weeks) ................... 3
m TMS 125 Massage
Techniques II (Second 8 weeks) ..... 3
m TMS 140 Massage Clinical I (Second 8 weeks) .....  2
m TMS 162 Neuromuscular for Massage Therapy. ..... 3
Spring Semester. ..... 12
m TMS 130 Massage Techniques III ..... 4
m TMS 146 Massage Clinical II ..... 2
m TMS 150 Business Practices for Massage Therapists ..... 3
m TMS 164 Pathology forthe Massage Therapist3
PROGRAM TOTAL ..... 31

* BIO 260 must be taken in a face-to-face course format.
+ Program admission required for enrollment. Veterans or military members eligible for education benefits should see Programs with Special Admission Applications, page 228.
m Major course requires minimum grade of $C$.


## JobTitle

- Massage Therapist


## About the Occupation

Massage therapists work in a wide variety of settings, from spas to fitness centers to various health care facilities.

Massage therapist may choose from different approaches to produce physical, mental and emotional benefits through the manipulation of the body's soft tissue. These approaches vary from deep work to light work to energy work.

To be effective, massage therapist must be trained in anatomy, physiology, kinesiology and pathology; and be empathetic to the needs of others.

Some massage therapist choose to focus their work purely in the massage therapy profession, while others choose to combine their massage therapy training in another profession, such as aesthetics, nursing, physical therapy, athletic training, doula services, counseling, business and many other fields.

## Highlights of Waubonsee's Program

- A member of the American Massage Therapy Association
- An Associated Bodywork and Massage Professionals school member
- Approved by the Illinois State Board of Higher Education
- Graduates take the Federation of State Massage Therapy Boards, Massage and Bodywork Licensing Examination (MBLEx).


## Procedure for Entering the

## Therapeutic Massage Program

Students seeking admission to the Therapeutic Massage Program are required to:

1. Meet with Counseling (see directory) to establish a schedule for taking prerequisite and program courses.
2. Obtain specific admission information by contacting the Dean for Health Professions and Public Service (see directory).
3. Complete the special application required for entry into the program, which is available from the office of Health and Life Sciences, the Counseling, Advising and Transfer Center, or on the Internet www.waubonsee.edu/healthcareers. Enrollment in the therapeutic massage (TMS) courses is limited in order to provide the best possible educational experience for students. Students desiring to enter the program for fall must make application by April 1.
4. Complete each prerequisite course with a minimum grade of C .
5. Understand that the therapeutic massage application, completion of prerequisite courses, and previous transcripts are required for admission to the program.
6. Follow the program sequence for all TMS courses once accepted into the program. A student may opt to complete the TMS 162 and TMS 164 courses prior to submitting an application to the therapeutic massage program. For continuation in the therapeutic massage program, a 2.0 or better GPA must be received in each of the major courses.
7. Submit completed health form and documentation of current immunizations and a 2 -step tuberculosis (TB) test upon acceptance into the program.
8. Science courses taken more than five years before the application deadline must be retaken. There are no exceptions.

## Program Costs

In addition to tuition and regular fees, the therapeutic massage student has the following minimum fees and expenses:
Textbooks forTMS classes $\$ 400$
Uniform/shoes ........................................................................... $\$ 80$
Massage table ........................................................................ $\$ 450$
Massage supplies................................................................ \$100
Four professional massages .................................................. \$240
Physical exam, immunizations,
TB testing. per health care provider
Total Estimated Costs
(excluding medical requirements) \$1270

NOTE: These fees and expenses are approximate costs and are subject to change without prior notice to the student.

# Welding Technology 

## Welding Technology <br> Associate in Applied Science Degree (890A) major code

The Welding Technology Program provides students practical skills in print reading, pipe welding, MIG welding, stick welding and TIG welding, and preparation for AWS certifications.
General Education Requirements ..... 15
COM 100 or 121 Communications ..... 3
ENG 101 or 152 English ..... 3
ENG 102 or 153 English ..... 3
Mathematics elective - ..... 3
Social and Behavioral
Sciences elective ..... 3
Welding Technology
Major Program Requirements ..... 33
WLD 101 Blueprint Reading for Welders. ..... 3
WLD 115 Oxy-Fuel Welding and Cutting ..... 3
WLD 120 Shielded Metal Arc Welding I ..... 3
WLD 125 Gas Metal Arc and Flux Cored Arc Welding ..... 3
WLD 130 Gas Tungsten Arc Welding ..... 3
WLD 200 Fabrication and Weld Design. ..... 3
WLD 220 Shielded Metal Arc Welding II ..... 3
WLD 221 Shielded Metal Arc Welding-Pipe I ..... 3
WLD 222 Shielded Metal Arc Welding-Pipe II ..... 3
WLD 231 Gas Tungsten Arc Welding-Pipe I ..... 3
WLD 232 Gas Tungsten Arc Welding-Pipe II. ..... 3
Electives ..... 12
Select electives from: Accounting (ACC), Auto Body Repair (ABR), Automa-tion Technology (AMT), Automotive Technology (AUT), Business Administra-tion (BUS), Computer Aided Design and Drafting (CAD), Computer Informa-tion Systems (CIS), Construction Management (CMT), Electronics Technology(ELT), Engineering (EGR), Heating, Ventilation and Air Conditioning (HVA),Industrial Technology (IDT), Internship (ITS), Management (MGT), Marketing(MKT), Machine Tool Technology (MTT), Welding (WLD)PROGRAM TOTAL60

- See course choices listed on pages 72-73.


## JobTitles

- Arc Welder
- Spot Welder
- Production Welder
- Construction Welder


## About the Occupation

The job of a welder is to permanently join metal parts. Some welders work in the construction industry applying their trade to buildings, bridges, pipelines and more. There are four basic welding processes, and the equipment and skills for each differ. Welders apply the science of joining metal with the art and handeye coordination required to make a good weld.

## Highlights of Waubonsee's Program

- Waubonsee's Welding Technology Program includes courses in each of the four basic welding processes: oxyacetylene, electric arc, gas metal $\operatorname{arc}$ (MIG or CO2) and gas tungsten arc (TIG).
- The curriculum includes four courses devoted specifically to pipe welding.
- The curriculum aligns with the standards of the American Welding Society.


## Welding Technology

Certificate of Achievement
(893C) major code
The Welding Technology certificate provides the student with entry-level skills to weld a variety of metals using the major welding processes in all positions.

## Course Requirements

WLD 101 Blueprint Reading for Welders................ 3
WLD 115 Oxy-Fuel Welding and Cutting ................ 3
WLD 120 Shielded Metal Arc Welding I ................. 3
WLD 125 Gas Metal Arc and Flux Cored Arc Welding .................... 3
WLD 130 Gas Tungsten Arc Welding...................... 3
PROGRAM TOTAL ............................................................... 15

## Advanced Welding Certificate of Achievement (895A) major code

The Advanced Welding Technology certificate provides the student with the skills needed to layout, fabricate and weld various metals using a variety of positions and processes.

## Course Requirements

WLD 101 Blueprint Reading for Welders.................. 3
WLD 115 Oxy-Fuel Welding and Cutting .................. 3
WLD 120 Shielded Metal Arc Welding I................... 3
WLD 125 Gas Metal Arc and Flux Cored Arc Welding ................................... 3
WLD 130 Gas Tungsten Arc Welding........................ 3
WLD 200 Fabrication and Weld Design.................... 3
WLD 220 Shielded Metal Arc Welding II .................. 3
WLD 221 Shielded Metal Arc Welding—Pipe I ....... 3
WLD 222 Shielded Metal Arc Welding—Pipe II ...... 3
WLD 231 Gas Tungsten Arc Welding—Pipe I .......... 3
WLD 232 Gas Tungsten Arc Welding—Pipe II ......... 3
PROGRAM TOTAL .............................................................. 33


Manufacturing Technology at Waubonsee Community College includes: Automation, Advanced Manufacturing, Computer Aided Design (CAD) and Welding Technology. You will practice skills on the state-of-the-art machines, including Computer Numerical Control (CNC) lathes and milling machines, while additional laboratories provide valuable experience learning to install, maintain, operate and service all types of automated systems and using AutoCAD software and computer aided manufacturing using Mastercam and Esprit software. You can also learn a variety of welding processes to meet the challenges of advanced technology and new materials.

Using a combination of your own imagination and the latest technology, you'll solve problems and create better products for the future. And because the field is so diverse, it provides unlimited opportunities for people of all personalities and education levels.

You can prepare for a career in modern manufacturing by earning a degree or certificate at Waubonsee. Our program has strong ties to the real world of work due to our experienced faculty members and our support of the National Association of Manufacturers endorsed Stackable Certification System. This system aligns industry-validated credentials from such organizations as the Manufacturing Skill Standards Council (MSSC), National Institute for Metalworking Skills (NIMS) and the Occupational Health and Safety Administration (OSHA) with academic programs and occupations in all manufacturing sectors.

Earn a certificate or a degree in one or more of the manufacturing technology programs to meet the demands of employers in modern manufacturing who are specifically looking to hire multi-skilled technicians into new and up-todate operations.

# World Wide Web 

## Website Development

## Associate in Applied Science Degree (331B) major code

This degree prepares students for constructing, developing and maintaining professional Web content. A graduate from this program will have a background in using cutting-edge tools to create exciting Web pages with graphic and animated content. Career opportunities include Web author and Web page developer.
General Education Requirements ..... 15
ENG 101 or 152 English ..... 3
ENG 102 or 153 English ..... 3
Communications (COM) elective • ..... 3
Mathematics elective • ..... 3
Social and Behavioral
Sciences elective • ..... 3
CIS Core Program Requirements ..... 15
CIS 110 Business Information Systems ..... 3
CIS 115 Introduction to Programming ..... 3
CIS 170 Networking Essentials ..... 3
CIS 205 Information Technology
Project Management ..... 3
WEB 110 Web Development
With HTML ..... 3
Website Development
Major Program Requirements ..... 18
CIS 142 JavaScript Programming ..... 3
CIS 202 Database Management. ..... 3
CIS 261 PHP Web Server Programming ..... 3
GRD 170 Digital Image ..... 3
WEB 230 Dreamweaver ..... 3
WEB 250 Advanced Website Development ..... 3
Electives ..... 12
Select electives from: Computer Information Systems (CIS),Graphic Design (GRD), Internship (ITS), World Wide Web (WEB)
PROGRAM TOTAL60

- See course choices listed on pages 72-73.


## JobTitles

- Web Developer
- Webmaster
- Web Designer
- Web Editor


## About the Occupation

Web programmers or Web developers create the interactivity on a website including the actions on forms, rollovers for menus, and any other programing on the site. Webmasters design and maintain the coding and proper functioning of a website. Website editors create and edit content on a website. All Web workers collaborate with clients to meet the needs of the organization's websites and many employers expect Web workers to have skill sets from the job titles listed.

## Highlights of Waubonsee's Program

- The degree includes a set of five core information systems courses, along with well-defined elective choices.
- Waubonsee Community College is accredited by Alpha Beta Gamma International Business Honor Society to initiate members into the honor society for business and related professional disciplines. For additional information about the society, visit www.abg.org.


## Web Authoring

## Certificate of Achievement

(337A) major code
This certificate is intended for individuals interested in developing, constructing and maintaining Web sites for the World Wide Web. Graduates are able to develop, construct and maintain Web sites with graphic and animated content.

## Course Requirements

CIS 115 Introduction to Programming ................. 3
CIS 142 JavaScript Programming ........................ 3
CIS 261 PHP Web Server Programming .............. 3
GRD 160 Computer Illustration.............................. 3
GRD 170 Digital Image ........................................... 3
GRD 280 2-D Animation and Multimedia................. 3
WEB 110 Web Development With HTML .............. 3
WEB 230 Dreamweaver......................................... 3
WEB 250 Advanced Website Development ........... 3
PROGRAM TOTAL .............................................................. 27


There are several Web development certificates and degrees offered by both the Graphic Design and World Wide Web curriculums. The certificate and degree titles in both areas may sound similar, but there are distinct differences between the two. Your own specific background and interest will determine which certificate or degree is best for you. If you are interested in the artistic design of Web pages through the use of design software, design layout techniques, advanced use of multimedia, animation, sound and video, the Graphic Design certificates and programs are appropriate for study. If you are interested in the construction, maintenance and support of Web pages through the use of computer programming and limited Web design software, the World Wide Web certificates and degrees are appropriate. In short, the Graphic Design certificates and degree focus on the design of Web pages, while the World Wide Web certificates and degrees primarily focus on the maintenance and support of websites. Please contact Counseling (see directory) for more specific descriptions of these certificates and degrees and to discuss which one may be most appropriate for you.

## WAUBONSEE <br> what can you discover

# Course Descriptions 

Course
Descriptions

## Course <br> Numbering System

All credit courses are described on the following pages. Curriculum placement and other course attributes are signified by the three-digit course numbers explained below.

## 001-049

Adult and Workforce Development courses. Vocational update/skills courses. Do not apply to any college certificate or degree.

## 050-099

Semester hour (sem hr) credit courses for developmental education. Do not apply to any college certificate or degree.

## 100-199

Semester hour (sem hr) credit courses intended primarily for freshmen.

## 200-299

Semester hour (sem hr) credit courses intended primarily for sophomores.

## Definitions

Terminology used in course descriptions is defined below.

## prereq

prerequisite(s) - courses or requirements that must be completed before taking the described course.

## coreq

corequisite(s) - courses or requirements that must be taken concurrently with the described course.

## IAI

designation of Illinois Articulation Initiative course number for courses that are IAI general education or major courses. Refer to the chart in this section.

## lec/lab

denotes the number of hours students spend per week in either lecture and/ or laboratory time (based on a 16-week course). Courses may be offered in less than 16 weeks, and lecture/laboratory time adjusted accordingly.

## sem hrs

semester hours - the credit hours that apply to the course.

## var

indicates that the credit hours applied to the course can vary depending upon projects undertaken.

## Course Discipline/ Prefix Cross Reference

Course descriptions are organized alphabetically by discipline. The following list shows the discipline and course prefix in the order in which they appear in this section.

Accounting (ACC)
Anthropology (ANT)
Apprentice Training Program (ATP)
Art (ART)
Astronomy (AST)
Auto Body Repair (ABR)
Automation Technology (AMT)
Automotive Technology (AUT)
Biology (BIO)
Business Administration (BUS)
Chemistry (CHM)
Chinese (CHN)
College Success Topics (COL)
Communications (COM)
Computer Aided Design and Drafting (CAD)
Computer Information Systems (CIS)
Construction Management (CMT)
Criminal Justice (CRJ)
Disability Studies (DIS)
Early Childhood Education (ECE)
Earth Science (ESC)
Economics (ECN)
Education (EDU)
Electronics Technology (ELT)
Emergency Medical Technician (EMT)

Engineering (EGR)
English (ENG)
Film Studies (FLM)
Finance and Banking (FIN)
Fire Science (FSC)
Foreign Languages: see Chinese, French,
German, Japanese, Spanish
French (FRE)
Geography (GEO)
Geology (GLG)
German (GER)
Graphic Design (GRD)
Health Care Interpreting (HCl)
Health Education (HED)
Health Information Technology (HIT)
Heating, Ventilation and
Air Conditioning (HVA)
History (HIS)
Human Services (HSV)
Humanities (HUM)
Independent Study (IND)
Industrial Technology (IDT)
Interdisciplinary Studies (IDS)
Internship (ITS)
Interpreter Training (ITP)
Japanese (JPN)
Laboratory Technology (LBT)
Legal Interpreting (LGI)
Machine Tool Technology (MTT)
Management (MGT)
Marketing (MKT)
Mass Communication (MCM)
Mathematics (MTH)
Medical Assistant (MLA)
Military Science (MSC)
Music (MUS)

Nurse Assistant (NAS)
Nursing (NUR)
Philosophy (PHL)
Phlebotomy (PBT)
Physical Education (PED)
Physics (PHY)
Political Science (PSC)
Psychology (PSY)
Reading (RDG)
Real Estate (REL)
Religious Studies (RLG)
Sign Language (SGN)
Social Science (SSC)
Sociology (SOC)
Spanish (SPN)
Surgical Technology (SUR)
Sustainability (SUS)
Theatre (THE)
Therapeutic Massage (TMS)
Welding Technology (WLD)
World Wide Web (WEB)

## Waubonsee's IAI General Education Courses

The chart below shows Waubonsee transfer courses (listed by IAI category) that meet IAI (Illinois Articulation Initiative) General Education Core Curriculum guidelines. IAI General Education Course Codes follow the Waubonsee title. Course descriptions in this section also include IAI codes as appropriate. Transfer degree guidelines list specific courses conforming to IAI core curriculum; see the appropriate section in this catalog. See page 20 for an explanation of the initiative.

| Commu | nication: | IAI Code: | FLM 270 | Film and Literature | HF 908 | MTH 132 | Calculus With Analytic |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| COM 100 | Speech Communication | C2 900 | FRE 202 | Intermediate French II | H1 |  | Geometry II | M1900-2 |
| ENG 101 | First-Year Composition I | C1 900 | GER 202 | Intermediate German II | H1 900 | MTH 202 | Mathematics for Elementary |  |
| ENG 102 | First-Year Composition II | C1 901R | HIS 111 | Western Civilization |  |  | Teachers II | M1903 |
| Fine Art |  | IAI Code: |  | to 1648 | H2 901 | MTH 210 | Finite Math | M1906 |
| ART 100 | Art Appreciation | F2 900 |  | Since 1648 | H2 902 | Mir | Social Sciences | M1900-B |
| ART 101 | History of Western |  | HIS 125 | American Culture: Colonial |  | MTH 233 | Calculus With Analytic |  |
|  | Ancient to Medieval | F2 901 |  | to Present | H2 904 |  | Geometry III | M1900-3 |
| ART 102 | History of Western Art- |  | HUM 101 | Survey of the Humanities | HF 900 | Physica | Science: IAI | Al Code: |
|  | Ren. to Modern Art | F2 902 | UM 102 | The Global Village | HF90 |  |  |  |
| ART 103 | History of Non-Western |  | HUM 201 | Modern Culture and |  | AST 100 | Introduction to |  |
|  | Art | F2 903N |  | the Arts | HF 903 |  | Astronomy | P1 906 |
| ART 104 | History of Photography | F2904 | PHL 100 | Introduction to |  | AST 105 | Astronomy | 906 |
| ART 105 | Women in Art | F2 907D |  | Philosophy | H4900 | CHM 100 | Introduction to |  |
| ART 106 | Contemporary Art- |  | PHL 101 | Introduction to Logic | H4906 |  | Chemistry | P1 902 |
|  | 1945 to Present | F2 902 | PHL 105 | Introduction to Ethics | H4904 | CHM 101 | Introduction to Chemistry- |  |
| FLM 250 | Film as Art: |  | PHL 110 | Introduction to Critical |  |  | Lab | P1 90 |
|  | A Survey of Film | F2 908 |  | Thinking | H4906 | CHM 102 | Introductio |  |
| FLM 260 | History of Film | F2909 | PHL 120 | Introduction to World |  |  | Organic Chemistry | P1 904 |
| FLM 270 | Film and Literature | HF 908 |  | Religions | H5 904N | CHM 103 | Introduction to |  |
| HUM 101 | Survey of the Humanities | HF 900 | PHL 201 | History of Philosophy I | H4901 |  | Organic Chemistry-Lab | P1 904L |
| HUM 102 | The Global Village | HF 904N | PHL 202 | History of Philosophy II | H4902 | CHM 121 | General Chemistry | P1 902L |
| HUM 201 | Modern Culture and |  | RLG 120 | Introduction to |  | ESC 100 | Earth Science | P1 90 |
|  | the Arts | HF 903 |  | World Religions | H5904N | ESC 101 | Survey of Earth Science |  |
| MUS 100 | Music: Art of Listening | F1900 | RLG 220 | Foundational Text |  |  | Lab | P1 905L |
| MUS 101 | Musics of the World | F1 903N |  | Old Testament | H5 901 | ESC 110 | ate |  |
| MUS 102 | Music in America | F1 904 | RLG 230 | Foundational Tex |  |  | Change | P1 905 |
| THE 100 | Theatre Appreciation | F1907 |  | New Testament | H5901 | ESC 120 | Introduction to |  |
| THE 130 | Diversity in American |  | RLG 240 | Foundational Texts: Qu'ran | H5901 |  | Meteorology | P1 905L |
|  | Theatre | F1 909D | SPN 202 | Intermediate Spanish II | H1900 | ESC 125 | Severe and Unusual |  |
| Humani | ities: | IAI Code: | SPN 205 | Spanish for Native |  |  | Weather | P1905 |
| ENG 211 | American Literature |  | SPN 2 | $\begin{aligned} & \text { Sp } \\ & \text { Int } \end{aligned}$ | H1 900 | ESC | Introduction to Oceanography | P1 905 |
|  | to 1865 | H3 914 |  | to Hispanic Literature | H3916 | GEO 121 | Physical Geography | P1 909L |
| ENG 212 | American Literature |  |  |  |  | GLG 100 | Introduction to Physical |  |
|  | From 1865 | H3 915 | Life Scie | nce: |  |  | Geology | P1 907 |
| ENG 215 | Masterpieces of American |  | BIO 10 | Introduction to Biology | L1 900 | GLG 101 | Introduction to Physical |  |
|  | Literature | H3915 | BIO 101 | Introduction to Biology- |  |  | Geology Lab | P1 907L |
| ENG 220 | Multicultural Literatures |  |  | Lab | L1 900L | GLG 102 | Historical Geology | P1 907L |
|  | of the U.S. | H3910D | BIO 102 | Human Biology | L1 904 | GLG 103 | Environmental Geology | P1 908 |
| ENG 221 | British Literature to 1800 | H3 912 | BIO 103 | Human Biology |  | GLG 120 | Geology of |  |
| ENG 222 | British Literature |  |  | Laboratory | L1 904L |  | the National Parks | P1907 |
|  | From 1800 | H3913 | BIO 110 | Environmental Biology | L1 905 | PHY 103 | Concepts of Physics | P1 900 |
| ENG 225 | Masterpieces of British |  | BIO 111 | Environmental Biology- |  | PHY 104 | Concepts of Physics-lab | P1 900L |
|  | Literature | H3 913 |  | Lab | L1 905L | PHY 111 | Introduction to Physics I | P1 900L |
| ENG 226 | Shakespeare | H3 905 | BIO 120 | Biology I | L1 900L | PHY 221 | General Physics I | P2 900L |
| ENG 228 | Children's Literature | H3918 | BIO 122 | Principles of Biology II | L1 910L |  |  |  |
| ENG 229 | Introduction to Literature | H3900 | Mathem | atics: IA | Al Code: |  |  |  |
| ENG 230 | Introduction to Poetry | H3 903 |  |  |  |  |  |  |
| ENG 235 | Introduction to Fiction | H3 901 | $\begin{aligned} & \text { MTH } 101 \\ & \text { MTH } 102 \end{aligned}$ |  | M1 901 |  |  |  |
| ENG 240 | Intro. to Drama as |  | MTH 107 | Basic Statistics | M1904 <br> M1 902 |  |  |  |
|  | Literature | H3 902 | MTH 107 | Basic Statistics | M1902 |  |  |  |
| ENG 245 | World Literature | H3 906 | MTH 131 | Calculus With Analytic |  |  |  |  |
| ENG 255 | Women's Literature | H3911D |  | Geometry I | M1900 |  |  |  |


| Social and Behavioral Sciences: |  | Al Code: | IAI General Education Core course designations: |
| :---: | :---: | :---: | :---: |
| ANT 101 | Cultural Anthropology | S1 901N | Communication: C |
| ANT 102 | Human Origins | S1 902 | Physical and Life Sciences: P \& L |
| ANT 110 | Introduction to |  | Mathematics: M |
|  | Archaeology | S1 903 | Humanities and Fine Arts: H \& F |
| ECN 100 | Introduction to |  | Social and Behavioral Sciences: $S$ |
|  | Economics | S3 900 |  |
| ECN 201 | Principles of Microecon. | S3 902 | "under IAI review |
| ECN 202 | Principles of Macroecon. | S3 901 |  |
| GEO 120 | World Regional Geography | y S4900N | For specific, up-to-date information on the IAI, |
| GEO 220 | Geography of the Developing World | S4 902N | visit Waubonsee's home page, www.waubonsee. edu/transferring or access the IAI website directly, |
| GEO 235 | Human Geography | S4 900N | www.itransfer.org. |
| HIS 101 | World History to 1500 | S2 912N |  |
| HIS 102 | World History Since 1500 | S2 913N |  |
| HIS 121 | American History to 1865 | S2 900 |  |
| HIS 122 | American History |  |  |
|  | Since 1865 | S2 901 |  |
| HIS 205 | History of the Middle East | S2 918N |  |
| HIS 215 | History of China and Japan | S2 908N |  |
| HIS 225 | History of Africa | S2 906N |  |
| HIS 235 | Latin American History | S2 910N |  |
| PSC 100 | Introduction to American |  |  |
|  | Government | S5 900 |  |
| PSC 220 | Comparative Government | S5 905 |  |
| PSC 240 | State and Local |  |  |
|  | Government | S5 902 |  |
| PSC 260 | Introduction to |  |  |
|  | International Relations | S5 904 |  |
| PSY 100 | Introduction to Psych. | S6 900 |  |
| PSY 205 | Life-Span Psychology | S6 902 |  |
| PSY 215 | Adulthood and Aging | S6 905 |  |
| PSY 220 | Child Psychology | S6 903 |  |
| PSY 226 | Adolescent Psychology | S6 904 |  |
| PSY 235 | Social Psychology | S8 900 |  |
| SOC 100 | Introduction to Sociology | S7 900 |  |
| SOC 120 | Racial and Ethnic |  |  |
|  | Relations | S7 903D |  |
| SOC 130 | Sociology of Family | S7 902 |  |
| SOC 210 | Social Problems | S7 901 |  |
| SOC 230 | Sociology of Sex and Gender | S7 904D |  |

Course
Descriptions

## Waubonsee's IAI Major Courses

The chart below shows Waubonsee transfer courses (listed by IAI major) that meet IAI (Illinois Articulation Initiative) core curriculum for specific transfer majors. IAI major course codes follow the Waubonsee title. Course descriptions in this section also include IAI codes as appropriate. See page 18 for an explanation of the initiative.

| Art: | IAI Code: | Mass Communication: | IAI Code: |
| :---: | :---: | :---: | :---: |
| ART 110 Design I | ART 907 | COM $135 \begin{aligned} & \text { Introduction } \\ & \\ & \text { Integrated M } \\ & \text { Communicat }\end{aligned}$ |  |
| ART 111 Design II | ART 908 |  |  |
| ART 120 Basic Drawing I | ART 904 |  | MC 912 |
| ART 121 Basic Drawing II | ART 905 | MCM 130 Intro. to Mass Comm. <br> MCM 140 Television Production I <br> MCM 205 Basic Broadcast <br> Announcing | MC 911 |
| Biological Science: | IAI Code: |  | MC 916 |
| BIO 120 Principles of Biology I | BIO 910 |  | MC 918 |
| BIO 122 Principles of Biology II | BIO 910 | MCM 211 Introduction to |  |
| Business | IAI Code: | Radio Production | MC 915 |
| ACC 202 Financial Accounting | BUS 903 | MCM 215 Basic News Writing MKT 215 Principles of Advertising | MC 919 |
| ACC 203 Managerial Accounting | BUS 904 |  | MC 912 |
| BUS 207 Business Statistics | BUS 901 | Mathematics: | IAI Code: |
| CIS 110 |  | MTH 131 |  |
|  | BUS 902 |  | MTH901 |
| Chemistry | IAI Code: | MTH 132 Calculus With |  |
| CHM 121 General Chemistry | CHM911 | Analytic Geometry II <br> MTH 233 | MTH902 |
| CHM 122 Chemistry and Qualitative Anal |  | Analytic Geometry III | MTH903 |
| CHM $231 \begin{aligned} & \text { Oualitative Analysis } \\ & \text { Organic Chemistry I }\end{aligned}$ | CHM913 | MTH 236 Intro. to Linear Algebra | MTH911 |
| CHM 232 Organic Chemistry II | CHM914 | MTH 240 Differential Equations | MTH912 |
| Computer Science: | IAI Code: | Political Science: | IAI Code: |
| CIS 130 C++ Programming | CS 911 | PSC 280 |  |
| CIS 145 C\#.NET Programming | CS 911 |  | PLS 913 |
| CIS 150 Java Programming | CS 911 | Psychology: | IAI Code: |
| CIS 230 Advanced C++ | CS 912 | PSY 240 Abnormal Psychology | PSY 905 |
| CIS 250 Advanced Java | CS 912 | Theatre Arts: | IAI Code: |
| Criminal Justice: | IAI Code: | THE 110 Art of Oral |  |
| CRJ 100 Introduction to |  | Interpretation | TA 916 |
| Criminal Justice | CRJ 901 | THE 201 Fundamentals of Acting I | TA 914 |
| CRJ 101 Introduction to |  |  |  |
| Corrections | CRJ 911 | For specific, up-to-date information on the IAI, visit Waubonsee's home page, www.waubonsee. edu/transferring or access the IAI website directly, www.itransfer.org. |  |
| CRJ 107 Juvenile Justice | CRJ 914 |  |  |
| CRJ 230 Criminology | CRJ 912 |  |  |
| Engineering: | IAI Code: |  |  |
| EGR 101 Engineering Graphics | EGR 941 |  |  |
| EGR 220 Analytical |  |  |  |
| Mechanics-Statics | EGR 942 |  |  |
| EGR 230 Analytical Mechanics- |  |  |  |
| Dynamics | EGR 943 |  |  |

## Accounting (ACC)

AN ACCOUNTING OPPORTUNITY: Considering a career change? A job promotion? Most people holding a baccalaureate degree in any field can easily take accounting and business courses to prepare for the CPA (Certified Public Accountant) Examination and/or the CMA (Certified Management Accountant) Examination. Recommended Waubonsee Community College courses include the following:

## For the CPA and CMA Exams:

ACC 202 Financial Accounting
ACC 203 Managerial Accounting
ACC 215 Individual Tax Accounting
ACC 220 Intermediate Accounting I
ACC 221 Intermediate Accounting II
ACC $240 \quad$ Cost Accounting
BUS 211 Business Law
Additional courses for the CMA Exam:
ECN $201 \quad$ Principles of Economics-
Microeconomics
ECN $202 \quad$ Principles of Economics-
Macroeconomics
FIN 200
Principles of Finance
MGT 200 Principles of Management
For additional information, contact the division of Business and Career Technologies.

## ACC 101 Introduction to Accounting

This introductory accounting course emphasizes the development of a firm foundation in fundamental accounting procedures using the accounting cycle of a small business organized as a sole proprietorship. Topics include: transaction analysis, financial statements, the accounting cycle of service and merchandising firms, accounting for bank accounts, cash funds, accounts receivable, notes receivable, notes payable, inventory, long-term assets and introduction to accounting for corporations.

## (3 lec/0 lab)

3 sem hrs

## ACC 125 Accounting Information Systems

This course introduces processing business transactions using Peachtree, an integrated accounting software package. Accounting software applications include: general ledger systems for service and merchandising firms, voucher systems, fixed assets, payroll, financial statement analysis, departmentalized accounting, accounting system set-up and spreadsheets.
Recommended Prereq: ACC101 or concurrent enrollment or ACC202.
(3 lec/0 lab)
3 sem hrs

## ACC 130 Payroll Accounting

This course is a comprehensive study of the Fair Labor Standards Act, the Federal Insurance Contributions Act, Unemployment Tax Acts, the federal and state income tax withholding laws and fair employment laws as they relate to payroll accounting. Course coverage includes the preparation of payroll records and tax returns. The course also addresses current payroll accounting issues.
Recommended Prereq: ACC101 or ACC202. (3 lec/0 lab)

3 sem hrs

## ACC 202 Financial Accounting

This course focuses on procedures and concepts involved in providing relevant financial data to external and internal decision makers. It emphasizes the generation, interpretation and use of financial statements. Coverage includes the accounting cycle with detailed analysis of the transactions related to cash, investments, receivables, inventories, long-term assets, liabilities, stockholders' equity and time value of money.
Recommended Prereq: ACC101.
IAI: BUS 903.
(3 lec/0 lab) 3 sem hrs

## ACC 203 Managerial Accounting

This course focuses on accumulation, analysis and use of cost information needed for internal decision making in businesses. It covers cost identification; job-order, process, and activitybased costing; cost-volume-profit analysis; budgeting; standard costs; variance analysis; the statement of cash flows; capital budgeting; and short-term decision making.
Recommended Prereq: ACC202.
IAI: BUS 904.
(3 lec/0 lab)
3 sem hrs

## ACC 215 Individual Tax Accounting

This course is a study of the concepts of federal income taxation as they apply to individuals. Topics include gross income, exclusions, deductions, credits, the taxation of sole proprietors, tax planning strategies, and computation of gains and losses on the disposition of property.
(3 lec/0 lab)
3 sem hrs

## ACC 220 Intermediate Accounting I

This is the first of two courses in the advanced study of the assumptions, principles, procedures and practices involved in modern corporate financial accounting.
Recommended Prereq: ACC203.
(3 lec/O lab) 3 sem hrs

## ACC 221 Intermediate Accounting II

This is the second of two courses in the advanced study of the assumptions, principles, procedures and practices involved in modern corporate financial accounting.
Recommended Prereq: ACC220.
(3 lec/0 lab)
3 sem hrs

## ACC 235 Taxation of Limited Liability Companies (LLCs)

This course is a study of the taxation of Limited Liability Companies (LLCs). This course examines the different ways a Limited Liability Company (LLC) is taxed; as a sole proprietor, partnership, S Corporation or C Corporation. The course covers the formation, operations and preparation of tax returns of the different entity choices. The course highlights the advantages and disadvantages of the entity choices.
Recommended Prereq: ACC202; ACC215.
(3 lec/0 lab)
3 sem hrs

## ACC 240 Cost Accounting

This advanced study of the accumulation, analysis and use of cost information needed for internal decision making in business covers: accounting for quality allocation of indirect costs, activity-based costing, joborder costing, process costing, accounting for spoilage, standard costing, cost-volumeprofit analysis, inventory control, capital budgeting, decentralization and organizational performance.
Recommended Prereq: ACC203.
(3 lec/O lab) 3 sem hrs

## ACC 245 VITA Program: Tax Procedure and Practice

The basic principles of federal income taxes as they relate to low-to-moderate income individuals are applied in this hands-on course consisting of the preparation of various low-to-moderate individual income tax returns using Forms 1040EZ, 1040A, 1040 and IL1040. Participation and certification in the volunteer income tax program is required.
(3 lec/0 lab) 3 sem hrs

## ACC 250 Auditing I

This course provides students with concepts and procedures involved in the examination of financial statements for the purpose of establishing and expressing an opinion as to their reliability. This course will discuss statistical sampling techniques and the auditor's legal liability.
Recommended Prereq: ACC221.
(3 lec/0 lab)
3 sem hrs

## ACC 251 Auditing II

This course focuses on the practical application of the conceptual structure of the audit process, risk assessment in the audit process, evidence gathering and evaluation, and special topics to auditing a comprehensive audit case.
Recommended Prereq: ACC250.
(3 lec/0 lab)
3 sem hrs

## ACC 252 Accounting Research and Analysis

This course is designed to teach students how to perform accounting research using electronic databases. Students learn how to research United States Generally Accepted Accounting Principles (GAAP) using the Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC). Students examine International Financial Reporting Standards (IFRS) using the eIFRS electronic database. This course meets the State of Illinois CPA examination requirement for Accounting Research and Analysis.
Recommended Prereq: ACC220; ACC221.
(2 lec/0 lab)
2 sem hrs

## ACC 260 Advanced Accounting

This course is an examination of advanced financial accounting concepts including accounting for business combinations, with emphasis on the consolidation of parent/ subsidiary balance sheet and income statement reporting. It also covers accounting for the formation, operation and liquidation of partnership, as well as special reporting requirements for multi-national entities. Recommended Prereq: ACC221.
(3 lec/0 lab)
3 sem hrs

## ACC 297 Accounting Internship

Combining academic credit with professional experience, this internship allows students to learn about, observe and work in the accounting field. Eighty hours are required for 1 credit. Repeatable to a maximum of 4 semester hours; 6 semester hours from the accounting internship courses (ACC297, ACC298,
ACC299) may apply to the accounting degree or certificates.
Prereq: 15 semester hours of ACC courses; consent of instructor.
(0 lec/5 lab) 1 sem hrs

## ACC 298 Accounting Internship

Combining academic credit with professional experience, this internship allows students to learn about, observe and work in the accounting field. One hundred sixty hours are required for 2 credits. Repeatable to a maximum of 6 semester hours; 6 semester hours from the accounting internship courses (ACC297, ACC298, ACC299) may apply to the accounting degree or certificates.
Prereq: 15 semester hours of ACC courses; consent of instructor.
(0 lec/10 lab)
2 sem hrs

## ACC 299 Accounting Internship

Combining academic credit with professional experience, this internship allows students to learn about, observe and work in the accounting field. Two hundred forty hours are required for 3 credits. Repeatable to a maximum of 6 semester hours; 6 semester hours from the accounting internship courses (ACC297, ACC298, ACC299) may apply to the accounting degree or certificates.
Prereq: 15 semester hours of ACC courses; consent of instructor.
(0 lec/15 lab)
3 sem hrs

## Anthropology (ANT)

## ANT 101 Cultural Anthropology

Cultural Anthropology provides an introduction to social and cultural anthropology, emphasizing the socio-culture and psychological characteristics of various cultures: hunters, tribesmen, chiefdoms, peasants and industrial societies. Emphasis is placed on cultural universals, integration of social institutions and the continuing adaptation of man to his environment.

IAI: S1 901N.
(3 lec/0 lab)
3 sem hrs

## ANT 102 Human Origins

Physical anthropology explores the origins and development of human beings and our closest non-human relatives in the primate order. This course examines the mechanics of genetics and the processes of evolution. Students also investigate the fossil record and archaeological evidence in order to understand the sequence of early human ancestors. In addition, this course studies non-human primates, both living and extinct. The course also explores the adaptability and variation seen in modern human populations.

IAI: S1 902.
(3 lec/0 lab)
3 sem hrs

## ANT 110 Introduction to Archaeology

Introduction to Archaeology explores the concepts, principles and archaeological methods utilized by anthropologists to reconstruct and interpret past cultures. Specific prehistorical cultures are examined to illustrate this process.

IAI: S1 903.
(3 lec/0 lab)
3 sem hrs

## ANT 120 Cultures and Peoples of Central America

This course provides a study of the prehistorical, historical, social, economic and political characteristics of the following cultures: Guatemala, Honduras, Costa Rica, Panama, Cuba, Nicaragua and Mexico. Special emphasis is placed on the prehistorical development of Mesoamerica, the Spanish conquest and the hybrid culture developed throughout the region.
(3 lec/0 lab)
3 sem hrs

## ANT 296 Special Topics in Anthropology

This course offers in-depth exploration of a special topic, issue or trend in the anthropology field. Repeatable to a maximum of 12 semester hours for different special topics; 6 semester hours may apply to a degree or certificate.
Note: No topic can be offered more than twice in three years.
(1 to 3 lec/0 lab)
1 to 3 sem hrs

## Apprentice Training Program (ATP)

## ATP 100 Carpentry Pre-Apprenticeship

This course is designed to introduce and prepare the pre-apprentice for safety and accident prevention; construction/carpentry terminology; tool and material identification; proper and safe use of tools; materials/material handling; and physical training. Best practices and industry standards in construction layout, metal stud framing, ceiling systems and scaffolding will be studied. Students must be recommended by the Chicago Regional Council of Carpenters Apprenticeship Program.
(3 lec/24 lab)
15 sem hrs

## ATP 101 Carpenters Apprenticeship I

This course is designed to familiarize the apprentice with the relationship between the United Brotherhood of Carpenters and Joiners of America and their Signatory Contractors, with an emphasis placed on interpreting the By-Laws and Working Rules from the Chicago Regional Council of Carpenters. This course is also designed to familiarize the apprentice with best practices in construction layout, printreading for construction carpentry, OSHA rules and regulations regarding scaffolding, best practices in metal stud framing of nonload bearing partitions, and familiarization with industry standards and procedures in framing suspended ceilings for drywall and in the installation of suspended exposed grid acoustical ceilings. Emphasis will be placed on converting finish dimensions to rough, calculating and laying out rough openings and calculating missing dimensions. In addition to learning scaffolding rules and regulations, apprentices will erect supported scaffolds including: systems, tube and clamp, welded frame, mobile tower, pump jack and ladder jack. This course will also introduce printreading fundamentals with an emphasis placed on standards, conventions, symbols and abbreviations according to standard architectural practices. Apprentices will also be provided a broad overview of the advantages and disadvantages of light gauge metal framing, standard available framing materials, basic fire ratings and acoustical performances of commercial partition assemblies with an emphasis on translating dimensions from commercial working drawings through linear math conversions for the purpose of rough wall layout.
(1 lec/8 lab)
5 sem hrs

## ATP 102 Carpenters Apprenticeship II

This course is designed to familiarize the apprentice with a variety of topics including: concrete, exterior and interior trim, and stairs. Students will become familiar with three representative concrete forming systems: Symons Steel-Ply System, Jahn Forming System and Symons Resi-Ply, and learn the advantages of each system. Best practices in residential exterior trim installation, focusing on installing fiber cement board and wood siding, roof ventilation, proper flashing, weatherproofing, and window and door installation will be covered. Cutting and installing various trim members including base, shoe, chair-rail and crown, as well as basic window components will be discussed. Additionally, students will be introduced to basic stair construction, with an emphasis on conversions between decimals and fractions, direct proportion and the development of a stair formula. The stair formula will be used to determine all the dimensions required to build a stair that passes local codes, and shop projects will be used to introduce basic stair layout techniques and assembly procedures.
(1 lec/8 lab)
5 sem hrs

## ATP 103 Carpenters Apprenticeship III

This course is designed as a continuation of stairs, and an introduction to rafters, and cabinet installation and printreading. Students will be introduced to advanced stair concepts including locating landings, change of direction, offset decks, maintaining headroom and three step winders. Students will also be introduced to basic roof construction of an equal sloped roof that includes gable and hip roofs. Rafter theory including terminology and the practical application of roof framing concepts to job site conditions will be discussed. Students will be introduced to equal pitched intersecting roof construction and gable end wall framing. Calculations, layout, and installation of supporting and shortened valley rafters, hip valley jacks, cripple jacks, and valley jack rafters will be introduced. Students will also become familiar with best practices in installation of pre-manufactured cabinets and counter tops. There will be an emphasis on installing all materials and trim pieces plumb, level and square by the use of scribing: fillers, skins (veneer facing) toe kicks and counter tops. This course also includes an extensive coverage of reading and interpreting four different commercial prints utilizing AIA (American Institute of Architects) standards.
(1 lec/8 lab)
5 sem hrs

## ATP 110 Electrical Apprentice I

This study of the history of apprenticeship, the local and its by-laws, the electrical industry and its future covers the methods and techniques for proper electrical wiring. In addition to a general review of mathematics, also studied are electronic theory, Ohm's Law, safety, first aid and direct current (DC) series circuits. (3 lec/0 lab)

3 sem hrs

## ATP 111 Electrical Apprentice II

The course continues the study of direct current (DC) in parallel combination circuits and how DC theory is used to solve on the job problems. Magnetism, circuit configurations and ground fault and overcurrent protection devices are emphasized. The student is introduced to blueprint reading fundamentals, including symbols for electrical and mechanical devices. The National Electrical Code is also introduced. Recommended Prereq: ATP 110
(3 lec/O lab)
3 sem hrs

## ATP 112 Electrical Apprentice III

The student is introduced to the IBEW constitution and learns parliamentary procedure. Progressing through additional job information subjects the student learns more about safety and electric shock hazards. Students study the National Electrical Code. Course reviews direct current (DC) theory and introduces the oscilloscope, and resistivecapacitance (RC) circuits.
Recommended Prereq: ATP 111
(3 lec/0 lab)
3 sem hrs

## ATP 113 Electrical Apprentice IV

The student is introduced to transformers and inductive capacitance (IC) circuits. The student will learn bending methods, wire sizing, and calculating conductor amperes. Calculating range loads, residential loads and multi-family dwelling loads according to National Electrical Code (NEC) requirements will be studied along with blueprints and layouts.
Recommended Prereq: ATP 112
(3 lec/0 lab)
3 sem hrs

## ATP 114 Electrical Apprentice V

Student learns some applications of electronics and studies diodes, power supplies, transducers, transistors, silicon control rectifiers (SCR), triacs, diacs, amplifiers and operational amplifiers (OP) amps and their application to motor controls. Student specializes in industrial blueprints and complete building wiring layouts.
Recommended Prereq: ATP 113
(3 lec/0 lab)
3 sem hrs

## ATP 210 Electrical Apprentice VI

Additional study of various electrical codes is presented and includes a comprehensive study of electrical grounding and safety with a review of transformers.
Recommended Prereq: ATP 114
(3 lec/0 lab)
3 sem hrs

## ATP 211 Electrical Apprentice VII

The student is introduced to lightning protection systems and the theory and installation of fiber optics. Also studied are various controls and circuits associated with electric motors. Students will concentrate on starting protection devices, reverse and jog controls, and circuit design. Trouble shooting and circuit analysis will be introduced. Motor starters and clutches with drives will also be studied.
Recommended Prereq: ATP 210
(3 lec/0 lab)
3 sem hrs

## ATP 212 Electrical Apprentice VIII

Students work with the power factor and its correction, power factor problems, split phase and capacitor motors, universal motors and three-phase operations. Student is introduced to digital electronics and Boolean Algebra. Students continue the study of Motor Controls and are introduced to motor speed controls and variable speed drives. Students will become familiar with programmable logic controllers, basic hardware, programming ladder diagrams, start up and troubleshooting. Students will also learn air conditioning and refrigeration fundamentals. Use of testing instruments will train students in methods of locating cable faults. Also studied are calculations of motor circuits, protection and relationship to National Electrical Code (NEC). Sections dealing with hazardous locations, special equipment, and occupancies are covered.
Recommended Prereq: ATP 211
(3 lec/0 lab)
3 sem hrs

## ATP 213 Electrical Apprentice IX

The student is introduced to what to expect after their apprenticeship. Student progresses to building complete fire alarm systems, and are introduced to fundamentals of instrumentation and structural wiring. Students also study solar photovoltaic systems and method of installation.
Recommended Prereq: ATP 212
(3 lec/0 lab)
3 sem hrs

## ATP 214 Electrical Apprentice X

Students will be introduced to high voltage testing instruments and their proper use and purpose are studied. Students will study power quality and harmonics and how to analyze and trouble shoot. Fuel cells will also be studied as alternative power generation. Types and usage of various security and alarm systems will be addressed along with networked building automation. Culmination of all National Electrical Code (NEC) course work previously taken with emphasis on common everyday use and interpretation of code book.
Recommended Prereq: ATP 213
(3 lec/0 lab)
3 sem hrs

## Art (ART)

## ART 100 Art Appreciation

This course is designed to encourage visual literacy and develop analytical skills of the non-art major. Students are introduced to the vocabulary and media of art through discussion and manipulation of materials. This course is also intended to develop an understanding and awareness of the contributions artists make to society. Participation in this course may include independent visit to galleries and/or museums which may require admission fees.

## IAI: F2 900.

(3 lec/0 lab)
3 sem hrs

## ART 101 History of Western ArtAncient to Medieval

This course is a study of the historical developments of the visual arts in Western society from prehistoric through medieval time periods. Discussion of major artistic trends and movements is framed by an examination of the historical context and social milieu.
Note: Participation in this course may include field trips which require admission fees.
IAI: F2 901.
(3 lec/0 lab)
3 sem hrs

## ART 102 History of Western ArtRenaissance to Modern Art

This course is a study of the historical developments of the visual arts in Western society from the Renaissance time period to the present. Discussion of major artistic trends and movements is framed by an examination of the historical context and social milieu.
Note: Participation in this course may include field trips which require admission fees.
IAI: F2 902.
(3 lec/0 lab)
3 sem hrs

## ART 103 History of Non-Western Art

This course is a study of the historical developments of the visual arts in non-Western society. Discussion of major artistic trends and movements is framed by an examination of the historical context and social milieu.

## IAI: F2 903N.

(3 lec/0 lab)
3 sem hrs

## ART 104 History of Photography

This course covers the history of photography from its beginnings in the 1830s to the present. It familiarizes the student with key photographic artists, styles and movements. Current photographic processes and criticism are discussed.
IAI: F2 904.
(3 lec/O lab)
3 sem hrs

## ART 105 Women in Art

This course focuses on women as creators and subjects of visual art throughout history and diverse cultures. Consideration is given to how gender is relevant to the definition, creation and appreciation of art.
IAI: F2 907D.
(3 lec/0 lab)
3 sem hrs

## ART 106 Contemporary Art - 1945 to Present

This course is a study of the historical developments of the visual arts in Western society from 1945 to the present. Discussion of major artistic trends and movements and individual artists is framed by an examination of the historical context and social milieu.

IAI: F2 902.
(3 lec/0 lab)
3 sem hrs

## ART 110 Design I

This is a basic course in the application and appreciation of the principles and elements of two-dimensional design. It examines selected systems and elements of visual organization through the use of line, color, mass, value and texture.

IAI: ART 907
(1 lec/5 lab)
3 sem hrs

## ART 111 Design II

This course explores the basic elements of three-dimensional design. Directed exercises using a variety of media are included as well as exploring historical and contemporary art concepts.
Note: Required for art majors.
Prereq: ART110.
IAI: ART 908
(1 lec/5 lab)
3 sem hrs

## ART 112 Color

This course introduces color theory and its application to the visual arts. Students explore the interaction of color in contemporary, historical and cultural contexts.
Recommended Prereq: ART110.
(1 lec/5 lab)
3 sem hrs

## ART 120 Basic Drawing I

This course encompasses drawing of natural and artificial forms as well as interpretive and inventive processes. Line, shape, value, mass, proportions and volume are explored emphasizing the use of black and white media. The course also includes vocabulary development, individual and class critiques and exposure to contemporary and historical drawings.
(1 lec/5 lab)
3 sem hrs

## ART 121 Basic Drawing II

This course is a continuation of ART120, with development of skill in representation, interpretation, abstraction and non-objective drawing techniques. Students explore color theory and application. Emphasis is on the use of charcoal, pastels, colored pencils, ink and collage materials. Course content includes vocabulary development, individual and class critiques and exposure to contemporary and historical drawings.
Note: Required for art majors.
Prereq: ART120.
IAI: ART 905
(1 lec/5 lab)
3 sem hrs

## ART 130 Ceramics I

This course is an introduction to the processes and techniques involved in making clay objects through hand-building and utilizing the potter's wheel. Various forms are explored. Issues related to both sculptural and functional aesthetics are addressed.
(1 lec/5 lab)
3 sem hrs

## ART 131 Ceramics II

This course guides students toward developing techniques involved in creating clay vessels on the potter's wheel and a further introduction into hand-building. Students are challenged with conceptual assignments relating to both the historical and contemporary world. Various forms are explored. Students learn to load and fire kilns of multiple processes.
Recommended Prereq: ART130.
(1 lec/5 lab)

## 3 sem hrs

## ART 135 Basic Digital Photography

This is a basic digital photography course for non-photo majors. Students learn basic camera operations using either a digital camera and/ or an electronic device capable of taking digital photos with six or more mega-pixels as well as how to create quality prints using Adobe Lightroom software.
Note: Students are required to have a Mac compatible external hard drive with at least 100 GB of storage, digital camera and/or an electronic device capable of taking digital photos with six or more mega-pixels.
(1 lec/5 lab)
3 sem hrs

## ART 140 Photography I

This course serves as an introduction to the art of black and white, 35 mm film photography. The student is introduced to basic darkroom techniques including film processing, enlarging, finishing and presentation. This course is made up of both lab and lectures, is designed to emphasize basic aesthetic grammar of photography, and provide a historical and critical context for visually analyzing and creating photographs.
Note: Students are required to have their own SLR 35mm film camera with interchangeable lenses and manual settings. Cameras are available to checkout by photography students. For more information please call the Photo Lab Coordinator, 630-466-2287.
(1 lec/5 lab)
3 sem hrs

## ART 142 Beginning Digital Photography

This course is designed to introduce students to computer tools that manipulate and enhance photographic images. Students learn the skills to correct, retouch and enhance digital input in order to create high-quality digital output utilizing Adobe Photoshop. Using a digital camera, students will learn manual exposure, digital capture, and specific lens characteristics.
Note: Students are required to have
their own DSLR digital camera that has interchangeable lenses, shoots with the RAW file format, has manual settings, and has a minimum of 8 mega-pixels. Cameras are available for checkout for checkout by photography students. For more information please call the Photo Lab Coordinator, 630-466-2287.
(1 lec/5 lab)
3 sem hrs

## ART 155 Sculpture I

This studio course introduces basic sculptural processes, materials, and tools, and idea communication through these methods. Studio safety is strongly emphasized. Processes include additive, modeling, constructive, subtractive, carving, and replacement casting. Time arts/4-D may be considered.
Recommended Prereq: ART111.
(1 lec/5 lab)
3 sem hrs

## ART 222 Life Drawing

This course focuses on the study of the human figure through selected assignments in contour, value, and gesture drawing of the undraped figure. Naturalistic and expressive interpretations in a variety of drawing media are included.
Prereq: ART120.

## (1 lec/5 lab)

3 sem hrs

## ART 230 Ceramics III

This course further develops the skills acquired in ART131 with emphasis placed on a more personal expression within the confines of the processes and material. More complex techniques are explored, and issues related to functional and non-functional aesthetics are addressed. Students learn to load and fire kilns of multiple processes.
Recommended Prereq: ART131.
(1 lec/5 lab)
3 sem hrs

## ART 231 Materials: Clay and Glaze Development

This course is an introduction to the processes and techniques involved in making clay bodies, glazes and slips for specific firing processes.
Prereq: ART130.
(0 lec/2 lab)
1 sem hrs

## ART 240 Photography II

In this course, students will experiment with advanced black and white darkroom techniques which will offer them distinctive opportunities to explore how to make creative photographs. This course will introduce medium format film, multiple imagery, construction of narratives, toning, and split filter printing. Students will learn to master camera operations and film processing, as well as special effects and manipulations. In the last part of the semester, students will apply these techniques to the printing of photographs in a self directed project.
Note: Students are required to have their own SLR 35mm film camera with interchangeable lenses and manual settings. Cameras are available for checkout by photography students. For more information please call the Photo Lab Coordinator, 630-466-2287. Prereq: ART140.
(1 lec/5 lab)
3 sem hrs

## ART 241 Photographic Lighting

This course introduces students to fundamental lighting techniques and concepts encountered in the studio and on location. Students are instructed in the use of 4 " x 5 " view camera, light meters, sheet film, instant film and digital photographing techniques. Both the artistic and commercial use of lighting are explored.
Note: Students are required to have their own DSLR digital camera that has interchangeable lenses, is capable of photographing with the RAW file format, has manual settings, and has a minimum of 8 mega-pixels. Cameras are available for checkout by photography students. For more information please call The Photo Lab Coordinator, 630-466-2287. Recommended Prereq: ART240. Prereq: ART142. (1 lec/5 lab)

3 sem hrs

## ART 242 Intermediate Digital Photography

Building upon techniques learned in previous courses, students refine their command and control of Adobe Photoshop skills, focusing on the use of more advanced photo manipulation tools. A strong emphasis is placed on the manipulated image, while engaging the student to create a cohesive final project of professional quality. Students will also be introduced to Adobe Lightroom software.
Note: Students are required to have their own DSLR digital camera that has interchangeable lenses, shoots with the RAW file format, has manual settings, and has a minimum of 8 mega-pixels. Cameras are available to checkout by photography students. For more information please call the Photo Lab Coordinator, 630-466-2287. Prereq: ART142.
(1 lec/5 lab)
3 sem hrs

## ART 243 Advanced Digital Photography

This advanced level course builds upon the student's digital abilities from previous classes utilizing Adobe Photoshop and Lightroom. Emphasis is placed on color management, profiling, printing, and commercial versus fine art practices along with an introduction to $4^{\prime \prime} \times 55^{\prime \prime}$ cameras with scanning backs. The culmination of this course is a final digital and archival print portfolio.
Note: Students are required to have their own DSLR digital camera that has interchangeable lenses, shoots with the RAW file format, has manual settings, and has a minimum of 8 mega-pixels. Cameras are available for checkout for photography students. For more information please call the Photo Lab Coordinator, 630-466-2287. Prereq: ART242.
(1 lec/5 lab)
3 sem hrs

## ART 255 Sculpture II

This studio course continues the exploration of sculptural processes, materials, and tools, and the idea of communication through sculptural methods. Studio safety is strongly emphasized. Students develop proficiency in selection, use and manipulation of materials as well as mastery of the processes involved.
Recommended Prereq: ART155.
(1 lec/5 lab)
3 sem hrs

## ART 260 Painting I

This course is an introduction to painting in acrylic and/or oil media. Students depict a variety of subject matter using a creative approach.
Note: Students are strongly encouraged to complete both ART110 and ART120.
Prereq: ART110 or ART120.
(1 lec/5 lab)
3 sem hrs

## ART 261 Painting II

This course is a continuation of ART260. Students explore a variety of painting techniques pertinent to the 21st century. Prereq: ART260.
(1 lec/5 lab)
3 sem hrs

## ART 262 Painting III

This course is a continuation of ART261. Students explore contemporary issues and how they relate to a realization of personal style in creating art work.
Prereq: ART261.
(1 lec/5 lab)
3 sem hrs

## ART 265 Watercolor

This course is an introduction to the basic techniques of transparent and opaque watercolor painting. Directed exercises in color and technique execution are included. Students produce finished paintings of still life, figure and/or landscape renditions.
Recommended Prereq: ART120.
(1 lec/5 lab)
3 sem hrs

## ART 290 Studio Art

This is an advanced studio course for art majors. It allows continuation and concentration in a subject field with emphasis on individual research and personal exploration. Students can further their knowledge in drawing, life drawing, painting, design, photography, sculpture or ceramics. Repeatable to a maximum of 12 semester hours; 6 semester hours may apply to a degree or certificate. Prereq: Consent of instructor.
(1 lec/5 lab)
3 sem hrs

## ART 293 Art Portfolio and Professional Development

This course provides students the necessary skills to create a digital portfolio to use as a promotional tool in their educational journey and in the creative job market.
(2 lec/3lab)
3 sem hrs

## ART 296 Special Topics for the Arts

This course offers in-depth exploration of a special topic, issue or trend in the arts. Repeatable to a maximum of 24 semester hours for different special topics; 6 semester hours may apply to a degree or certificate.
(0 to 6 lec/0 to 12 lab) 1 to 6 sem hrs

## Astronomy (AST)

## AST 100 Introduction to Astronomy

This course is a descriptive, nonlaboratory survey course in astronomy. Although the course is considered non-mathematical, some basic arithmetic is required. Topics include earth and sky, the structure and evolution of the solar system, stars, galaxies and the universe.
Note: AST100 will not count toward a degree if the student completes AST105.
IAI: P1 906.
(3 lec/0 lab)
3 sem hrs

## AST 105 Astronomy

This course is an introduction to the study of the universe and how the scientific method and modern tools are used to study it. Topics include history of astronomy; properties of the sun and planets and the structure and evolution of the solar system; nature and evolution of stars; galaxies and the beginning of the universe. Laboratory activities will include real and virtual astronomical viewing and experiments and will require some basic algebraic calculations.
Note: Students will not receive credit toward a degree for both AST100 and AST105.
Recommended Prereq: A course in basic algebra.
IAI: P1 906L.
(3 lec/2 lab) 4 sem hrs

## AST 296 Topics/lssues for the Sciences

This course offers in-depth exploration of a special topic, issue or trend in one or more of the biological or physical sciences fields. Repeatable to a maximum of 24 semester hours for different special topics; 6 semester hours may apply to a degree or certificate.
(1 to 6 lec/0 lab)
1 to 6 sem hrs

## Auto Body Repair (ABR)

## ABR 100 Auto Body Welding

This course is designed to develop a high level of student skill in the use of various welding and fastening techniques as they relate to auto body repair. Concurrently, the student practices with various tools used in the disassembly of auto body panels. Familiarization with shop facility and routine is also established.
Prereq: Reading assessment.
Coreq: ABR105; ABR110; ABR115; ABR120; ABR125.
(1 lec/4 lab) 3 sem hrs

## ABR 105 Sheet Metal Repair

This course trains students in the use of metal straightening tools and techniques vital to the repair of damaged auto body panels. Skill levels are developed which allow for metal finishing a panel without the use of body fillers.
Prereq: Reading assessment.
Coreq: ABR100; ABR110; ABR115; ABR120; ABR125.
(1 lec/2 lab)
2 sem hrs

## ABR 110 Fiberglass Panel and Plastic Repair

This course is designed to enable students to make repairs of both plastic and fiberglass panels.
Prereq: Reading assessment.
Coreq: ABR100; ABR105; ABR115; ABR120; ABR125.
(1 lec/2 lab)
2 sem hrs

## ABR 115 Basic Auto Body Repair

In this phase of auto body training, students are given the opportunity to apply skills learned previously. Some panel replacements may be necessary to complete the repair. Activities include feathering, taping, masking and spot repair.
Prereq: Reading assessment.
Coreq: ABR100; ABR105; ABR110; ABR120; ABR125.
(2 lec/4 lab)
4 sem hrs

## ABR 120 Auto Painting and Refinishing

This comprehensive course covers the entire area of auto painting, from the equipment used through prepainting procedures and application techniques including masking and taping, and finishing with rubbing and polishing. Each student must complete a checklist of tasks that encompasses the many facets of auto painting. Prereq: Reading assessment.
Coreq: ABR100; ABR105; ABR110; ABR115; ABR125.
(2 lec/4 lab)
4 sem hrs

## ABR 125 Auto Body Careers

This course provides students with exposure to the auto body field. Students experience and observe actual shop operations and career opportunities.
Prereq: Reading assessment.
Coreq: ABR100; ABR105; ABR110; ABR115; ABR120.
(1 lec/0 lab)
1 sem hrs

## ABR 130 Automotive Collision Appraisal

This course is designed to prepare students for entry into the field of collision repair and collision damage estimating. It deals with evaluating the extent of the damage and defining what repair costs will be for the vehicle.
Prereq: Reading assessment; all basic $A B R$ courses.
Coreq: ABR135; ABR140; ABR145; ABR150. (. 5 lec/1 lab)

1 sem hrs

## ABR 135 Frame Repair

This course gives students the opportunity to use various body frame machines and measuring systems to effect repairs to frames and unibodies.
Prereq: Reading assessment; all basic $A B R$ courses.
Coreq: ABR130; ABR140; ABR145; ABR150. (3 lec/6 lab) 6 sem hrs

## ABR 140 Glass Service

This course trains students in the care and service of automotive glass and glass replacement.
Prereq: Reading assessment; all basic $A B R$ courses.
Coreq: ABR130; ABR135; ABR145; ABR150. (. 5 lec/1 lab)

1 sem hrs

## ABR 145 Intermediate Auto Body Repair

This course involves the student in the repair of a vehicle with extensive damage. Students join into teams as they now apply all of their basic training. Sectioning, clipping, quarter panel replacement and frame straightening are included. Production and speed are stressed in this phase of the work.
Prereq: Reading assessment; all basic $A B R$ courses.
Coreq: ABR130; ABR135; ABR140; ABR150.
(3 lec/6 lab)
6 sem hrs

## ABR 150 Chassis and Electrical Systems for Auto Collision

This course is designed to provide auto body students with repair skills in automotive chassis and electrical systems as they relate to work in auto body and collision.
Prereq: Reading assessment; all basic $A B R$ courses.
Coreq: ABR130; ABR135; ABR140; ABR145. (2 lec/0 lab)

2 sem hrs

## ABR 215 Advanced Auto Body Repair

This final phase of the auto body repair program is designed to allow the auto body student mastery-level experiences. Students use their previously learned skills to complete reallife auto body and collision repairs. Prereq: Reading assessment; all advanced $A B R$ courses.
(1 lec/4 lab)
3 sem hrs

## ABR 297 Auto Body Internship

Combining academic credit with professional experience, this internship allows students to learn about, observe and work in the auto body repair field. Eighty hours are required for 1 credit. Repeatable to a maximum of 4 semester hours; 1 semester hour from the auto body internship courses (ABR297, ABR298, ABR299) may apply to the auto body degree or certificate. Prereq: Reading assessment; all basic $A B R$ courses; consent of instructor.
(0 lec/5 lab)
1 sem hrs

## ABR 298 Auto Body Internship

Combining academic credit with professional experience, this internship allows students to learn about, observe and work in the auto body repair field. One hundred sixty hours are required for 2 credits. Repeatable to a maximum of 6 semester hours; 1 semester hour from the auto body internship courses (ABR297, ABR298, ABR299) may apply to the auto body degree or certificate.
Prereq: Reading assessment; all basic $A B R$ courses; consent of instructor.
(0 lec/10 lab)
2 sem hrs

## ABR 299 Auto Body Internship

Combining academic credit with professional experience, this internship allows students to learn about, observe and work in the auto body repair field. Two hundred forty hours are required for 3 credits. Repeatable to a maximum of 6 semester hours; 1 semester hour from the auto body internship courses (ABR297, ABR298, ABR299) may apply to the auto body degree or certificate.
Prereq: Reading assessment; all basic $A B R$ courses; consent of instructor. (0 lec/15 lab) 3 sem hrs

## Automation Technology (AMT)

## AMT 100 Introduction to Manufacturing Automation Systems

This course introduces students to the basic control systems used to automate manufacturing processes. Content includes: hydraulics and pneumatics used for motion control, programmable controllers, sensors and vision systems, and robotics. This introduces students to the basic concepts needed to design manufacturing automation systems.
(3 lec/0 lab)
3 sem hrs

## AMT 102 Basic Electricity

This course introduces the student to foundational electrical concepts from atomic structure, how electricity is generated, and end uses. Core electrical knowledge such as Ohm's law, capacitance, inductance, and semiconductors are examined.
(3 lec/0 lab)
3 sem hrs

## AMT 105 Introduction to Automated Warehousing

An industrial technology overview course covering the basic knowledge and skills needed for supply chain technicians to successfully work in an automated distribution center. Introduction to troubleshooting and maintenance of complex electromechanical systems is a major focus of this class.
(2 lec/2 lab)

3 sem hrs

## AMT 110 Machine Fundamentals

This course gives students detailed hands-on knowledge of belt/sheaves, bearings, gearing, couplings, lubrication, pumps, and shaft alignment. Aspects of maintenance, mechanical troubleshooting, and failure analysis of mechanical power transfer systems are also covered.
Recommended Prereq: MTT100.
(2 lec/2 lab)

## 3 sem hrs

## AMT 120 Automated Systems I

This course covers commercial and industrial uses of motors and motor control circuits. Emphasis is placed on reading and understanding logic and wiring schematics. Students spend lab time wiring control systems, from simple logic circuits to more complicated relay and timer-based motor controls. Recommended Prereq: MTT100.
(2 lec/2 lab)

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3 \text { sem hrs }
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## AMT 121 Automated Systems II

This course is a continuation of the study into motor controls and automation. Topics include AC and DC sensors, semi-conductors, power supplies, soft-start-stop controllers, variable speed drives and PLCs. Lab time is spent wiring control circuits utilizing the above and programming variable frequency drives for specific purposes. PLC wiring and programming are introduced.
Recommended Prereq: AMT120.
(2 lec/2 lab)
3 sem hrs

## AMT 122 Automated Systems III

This advanced course is a continuation of the study into automation and system interactions. Topics include design, lay-out, and wiring control panels for specific purposes both high and low voltage components. Variable speed drive and PLC programming are further studied.
Recommended Prereq: AMT121.
(2 lec/2 lab)
3 sem hrs

## AMT 130 Fluid Power

This course introduces students to the field of fluid power. Students learn the basic laws that govern the generation and transmission of pneumatics and hydraulics, the basic components of hydraulic and pneumatic systems, and how those components work to form simple circuits. Lab time is spent building and troubleshooting common fluid power circuits.
(2 lec/2 lab)
3 sem hrs

## AMT 200 Automated Programming I

This course deals with the fundamentals of programmable logic controllers, programming basics of PLCs, troubleshooting, maintenance and system interconnections. Repeatable to a maximum of 12 semester hours; 3 semester hours may apply to a degree or certificate.
(2 lec/2 lab)

3 sem hrs

## AMT 201 Automated Programming II

This course introduces the student to basic robotic system construction, operation, troubleshooting, control, and programming. Open and closed loop control systems are examined including servo systems and PID control.
Recommended Prereq: AMT200.
(3 lec/0 lab)
3 sem hrs

## Automotive <br> Technology (AUT)

## AUT 100 Maintenance and Light Repair

This course is intended to provide individuals with the knowledge and experiences to meet Maintenance and Light Repair Tasks outlined by ASE. An emphasis is placed on shop safety, vehicle systems information, and shop procedures that are required. Employment options and responsibilities in the automotive field are also covered.
(1 lec/2 lab)
2 sem hrs

## AUT 105 Automotive Recycling

This course introduces the industry of automotive recycling. Emphasizing the Illinois Green CAR Program Standards, dismantling techniques, safety requirements, quality control, environmental best practices and parts grading are studied in this course. Students learn of the variety of career choices within the automotive recycling industry such as dismantler and inventory specialist, and in supporting industries such as auto body repair and auto technology.
(3lec/0 lab) 3 sem hrs

## AUT 110 Engine Service I

This course is designed to provide background in design, troubleshooting and service procedures of automotive engines. Use of service manuals, shop safety and shop procedures are covered. Students participate in the disassembly, identification and inspection of the engine components, and reassembly of the engine. This class is a hands-on experience of engine rebuilding and problem diagnosis.
Recommended Prereq: AUT100.
(1 lec/5 lab)
3 sem hrs

## AUT 111 Automotive Power Trains

This lecture-lab course is designed to provide the student an opportunity to learn the design, operation and service procedures of automotive power train components. Clutches, manual transmissions, transaxles, differentials and $4 \times 4$ service are covered.
Recommended Prereq: AUT100.
(1 lec/5 lab)
3 sem hrs

## AUT 112 Automotive Brake Systems

This lecture-lab course is designed to provide the student with a thorough understanding of the design, operation, and service procedures related to the complete automotive braking system. Both import and domestic designs are covered. Antilock brake systems and their relationship to steering stability, TPMS, and traction control systems are also discussed. Recommended Prereq: AUT100.
(1 lec/5 lab)
3 sem hrs

## AUT 113 Automotive Electrical/ Electronic Systems

This lecture-lab course is designed to provide the necessary knowledge and skills needed to service modern automotive electrical/ electronic systems. Basic electrical/electronic topics including circuit types and designs, electromagnetism principles, wiring diagram analysis, wire service, and electrical fault diagnosis are stressed. Operation and diagnosis of battery, starting, charging, and lighting systems are detailed. Theory, design, safety issues, and basic diagnostic techniques relating to electric/hybrid vehicles are also covered. Recommended Prereq: AUT100.
(1 lec/5 lab)
3 sem hrs

## AUT 116 Automotive Service Adviser

This course prepares the student for a variety of career opportunities in the automotive industry, including parts specialist, automotive service consultant, and automotive service supervisor. Emphasis is placed on professionalism, workplace safety and environmental responsibility.
Recommended Prereq: AUT100.
(3 lec/0 lab)
3 sem hrs

## AUT 117 Automotive Parts Specialist

This course prepares the student for a variety of career opportunities in the automotive parts field. Areas to be covered include counter and phone sales, inventory management, product displays, core returns, automotive systems, and in-store testing of components. Emphasis is placed on professionalism, workplace safety, and environmental responsibility.
Recommended Prereq: AUT100.
(3 lec/0 lab)
3 sem hrs

## AUT 120 Engine Service II

This advanced course in automotive engine service presents maintenance and service on some of the more common procedures and repairs on gasoline engines and related areas. Recommended Prereq: AUT100; AUT110.
(1 lec/5 lab)
3 sem hrs

## AUT 122 Automotive Suspension and Wheel Alignment

This lecture-lab course is designed to provide the students an opportunity to learn the design, operation, and service procedures relating to automotive chassis and undercar systems. Specific areas of study include tire and wheel service, steering system diagnosis and repair, complete suspension service, and modern four-wheel alignment procedures. Basic theory, operation, and service relating to tire monitor systems, traction control, and electronic steering stability systems are also covered. Recommended Prereq: AUT100.
(1 lec/5 lab)
3 sem hrs

## AUT 123 Automotive Ignition Systems

This lecture-lab course is designed to provide students with a thorough understanding and detailed knowledge of modern automotive ignition systems. Components of the primary and secondary ignition system are identified and discussed in detail. Both distributor-based and distributorless, including coil-over-plug ignition designs are discussed. Ignition related driveability diagnostic, troubleshooting, and service procedures are also covered.
Recommended Prereq: AUT100.
(1 lec/5 lab)
3 sem hrs

## AUT 124 Automotive Fuel and Emission Systems

This course examines the design and operation of various fuel delivery and emission components. Covered topics include fuel injection, fuel pumps and fuel delivery system components, evaporative emission, exhaust gas circulation and air measurement devices. Recommended Prereq: AUT100; AUT113.
(1 lec/5 lab)
3 sem hrs

## AUT 231 Automatic Transmissions/ Transaxles

This lecture-lab course in automatic transmission/transaxle theory and service covers the current more popular transmissions/ transaxle drive units including electronic transmissions. Students participate in inspection disassembly, repair, reassembly and testing of automatic transmissions/tranaxles. Recommended Prereq: AUT100; AUT111.
(1 lec/5 lab)
3 sem hrs

## AUT 232 Advanced Brakes and Suspension Systems

This course is designed to build upon prior skill and knowledge relating to the service/ repair of components found in the automotive chassis systems. The primary focus of this lecture/lab course is to provide students with an opportunity to gain "hands-on" direct work-related experience (for employment preparation) relative to automotive brake, suspension, and steering systems. Students enhance their knowledge in field-related diagnosis and service of both manual and electronically controlled chassis systems. Because this course is designed to build upon material previously covered in AUT112 Automotive Brake Systems and AUT122 Automotive Suspensions and Wheel Alignment, it is strongly advised that students complete those courses before taking this class. Recommended Prereq: AUT100; AUT112; AUT122.
(1 lec/5 lab)
3 sem hrs

## AUT 233 Applied Automotive Fuels and Electricity

This course is an advanced level lecture-lab course, designed to provide students with an opportunity to fine tune their electrical and performance-related diagnostic and troubleshooting skills. The testing and repair of various fuel system components and electrical/ electronic systems are covered. In addition, students acquire knowledge in field-related diagnosis and service of various sub systems including but not limited to: starting, charging, lighting, fuel delivery, and ignition system components. Because this course is designed to build upon material previously covered in AUT113 Basic Electricity, AUT123 Ignition Systems, and AUT124 Fuel and Emission System), it is strongly advised that students complete those courses before taking this class. Recommended Prereq: AUT100; AUT113; AUT123; AUT124.
(1 lec/5 lab)
3 sem hrs

## AUT 240 Service Shop Operations

This course is a simulation of the automotive shop environment that includes customer relations, vehicle diagnosis and repairs. Students are provided the opportunity to reinforce previously learned skills and also to complete NATEF tasks from other courses that were not completed. This course helps to make a smoother transition to the work environment. Recommended Prereq: AUT100; AUT110;
AUT111; AUT112; AUT113; AUT120; AUT122; AUT123; AUT124; AUT231; AUT232; AUT233.
(1 lec/5 lab)
3 sem hrs

## AUT 243 Advanced Engine Control Systems

This lecture-lab course is designed to acquaint students with electronic engine control systems (related primarily to OBD II 1996 vehicle to present) including advanced fuel, ignition and emission subsystems. The design and operation of generic and brand specific PCM based systems are discussed. This is a capstone performance class tying all major operating systems relating to vehicle performance together into a cohesive unit. Emphasis is on both computer and symptom-based driveability diagnosis using scan tools, multimeters and oscilloscopes as primary troubleshooting tools. Recommended Prereq: AUT100; AUT113; AUT123; AUT124; AUT233.
(1 lec/5 lab) 3 sem hrs

## AUT 245 Automotive Heating and Air Conditioning

This lecture-lab course is designed to develop the necessary skills and provide the knowledge required to understand, diagnose and service modern automotive heating and air conditioning systems.
Recommended Prereq: AUT100.
(1 lec/5 lab)
3 sem hrs

## AUT 246 Automotive Accessories and Diagnostics

This lecture-lab course is designed to further develop student competency in the area of automotive diagnostics. Advanced electrical/ electronic troubleshooting and repair procedures related to electrical accessories are emphasized. Areas of coverage include, but are not limited to, air bags, power windows, power locks, keyless entry, navigation systems and electronic dash and gauges.
Recommended Prereq: AUT100; AUT113;
AUT124.
(1 lec/5 lab) 3 sem hrs

## AUT 248 Classic Car Care and Service

When current managers and mechanics in charge of the countless private and public classic car collections retire, who will step in to take their place? This course is designed to pass the historical knowledge and mechanical skill of the vintage car era to those who have always viewed cars and trucks as something more than basic transportation. By combining the responsibilities of the archivist, curator and technician into one topic, participants in this program will learn everything from classic car appraisal to tips on maintaining the value of vintage vehicles. Topics discussed include establishing historical provenance, determining maintenance schedules, storage considerations, comprehensive detailing and mechanical system service. Basic service skills relating to carbureted fuel systems, distributor-based ignition designs and pre-electronic electrical service will also be covered.
Recommended Prereq: AUT100.

## (2 lec/2 lab)

## 3 sem hrs

## AUT 249 Hybrid and

## Alternative Fuel Vehicles

An introductory course developed to explore the theory, design and application of hybrid and electric vehicles (EV) used in the transportation industry. Participants will develop the knowledge and skills necessary to diagnose, service and maintain hybrid/EV vehicles. Topics include hybrid/EV safety, electric motors. generators, controllers, hybrid batteries, regerative braking and drive train operation. Both general and manufacturer specific hybrid/ EV types and designs will be covered.
Recommended Prereq: AUT100, AUT113.
(1 lec/5 lab)
3 sem hrs

## AUT 250 Light Duty Diesel Vehicle Engine Service I

This lecture-lab course is designed to develop the necessary skills and provide the knowledge required to understand, diagnose and service light duty vehicle diesel engines.
Recommended Prereq: AUT100.
(1 lec/5 lab)
3 sem hrs

## AUT 251 Light Duty Diesel Vehicle Engine Service II

This lecture-lab course is designed to develop the necessary skills and provide knowledge required to perform basic light duty diesel engine service in a shop. The course will provide the student with an introduction to light duty diesel maintenance and repair. Recommended Prereq: AUT100, AUT250.
(1 lec/5 lab)
3 sem hrs

## AUT 296 Special Topics/Automotive

This course explores selected topics as determined by the academic department and the instructor with emphasis on current automotive technology trends. Specific special topics are announced together with the prerequisites each term. Repeatable to a maximum of 12 semester hours for different special topics; 6 semester hours may apply to a degree or certificate.
(0 to 3 lec/0 to 6 lab) 1 to 3 sem hrs

## Biology (BIO)

See also Oceanography (ESC 130).

## BIO 100 Introduction to Biology

This general survey course deals with selected concepts and theories in biology, including the organization, function, heredity, evolution and ecology of living things. Biological issues with personal and social implications are introduced to allow students to make informed decisions regarding issues with a biological basis. Note: Not intended for students majoring in biology or the health professions. Students enrolling in BIO100 are not required to enroll in BIO101 (lab). However, those students needing a 4 semester-hour lab science for transfer purposes may wish to concurrently enroll in BIO100 and BIO101.
Recommended Coreq: BIO101.
IAI: L1 900.
(3 lec/0 lab)
3 sem hrs

## BIO 101 Introduction to Biology Laboratory

This laboratory course is intended to be taken concurrently with Introduction to Biology (BIO100). Through laboratory experiences, this course explores selected concepts and theories in biology such as organization, function, heredity, evolution and ecology using a variety of organisms as models.
Note: Not intended for students majoring in biology or the health professions. Recommended Coreq: BIO100.
IAI: L1 900L.
(0 lec/2 lab)
1 sem hrs

## BIO 102 Human Biology

This general survey course focuses on the biology of the human organism. Concepts include the structure, organization, and function of human systems with a focus on the interconnectedness of these systems, health and disease, growth and development, genetics, and evolution. Emphasis is placed on the relationship of the issues to the individual and society.
Note: Not intended for students majoring in biology or the health professions. Students enrolling in BIO102 are not required to enroll in BIO103 (lab).

IAI: L1 904.
(3 lec/0 lab)
3 sem hrs

## BIO 103 Human Biology Laboratory

This laboratory course is meant to be taken concurrently with Human Biology (BIO102). Through laboratory experiences, this course explores selected concepts and theories in biology such as organization, structure, function, heredity and evolution using the human organism as a model.
Note: Not intended for students majoring in biology or the health professions.
Recommended Prereq: BIO102 or concurrent enrollment.
IAI: L1 904L.
(0 lec/2 lab)
1 sem hrs

## BIO 110 Environmental Biology

This general survey course focuses on current environmental issues and possible solutions, as well as historical and present courses of action. Concepts include environmental policy, biodiversity, population ecology, pollution of land, air, and water, non-renewable and renewable resources. Both local and global environmental issues are examined from scientific, economic, biological, political, societal, and/or ethical viewpoints.
Note: Students enrolling in BIO110 are not required to enroll in BIO111 (lab). However, those students needing a 4 semester-hour lab science for transfer purposes may wish to concurrently enroll in BIO110 and BIO111. Recommended Coreq: BIO111.

IAI: L1 905.
(3 lec/0 lab)
3 sem hrs

## BIO 111 Environmental

## Biology Laboratory

This laboratory course is meant to be taken concurrently with Environmental Biology (BIO110). Through laboratory experiences, biotic and abiotic components of ecosystems are examined, as are various types of air, water and soil pollutants. This laboratory examines ecological principles in relation to environmental problems, allowing students to gain an awareness of their surroundings. Procedures and techniques used in the study of environmental issues are introduced, as are biological basics such as experimental design and problem solving.
Note: Not intended for students majoring in biology or in the health professions.
Recommended Prereq: BIO110 or concurrent enrollment.
Recommended Coreq: BIO110.
IAI: L1 905L.
(0 lec/2 lab) 1 sem hrs

## BIO 120 Principles of Biology I

This course includes an introduction to science, general chemistry, organic chemistry, cell structures and their functions, cellular activities (photosynthesis, respiration and reproduction), classical and molecular genetics, and evolution. Selected topics discussed in lecture are expanded upon and explored in the laboratory. Emphasis in the laboratory is on cellular functions and processes.
IAI: L1 910L, BIO 910. (3 lec/3 lab)

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4 \text { sem hrs }
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## BIO 122 Principles of Biology II

A continuation of BIO120, this course also covers the processes of scientific inquiry while focusing on evolution and biodiversity. It concentrates on the basic description of organisms ranging from prokaryotes to eukaryotes. Emphasis will be placed on comparing structural and functional relationships between representatives of all major phyla. Also, using morphological and molecular technology to reinforce phylogeny will be covered in multiple labs.
Recommended Prereq: BIO120 strongly recommended.
IAI: L1 910L; BIO 910.
(3 lec/3 lab)
4 sem hrs

## BIO 200 Nutrition

This course provides an overview of the physiological requirements and metabolism of amino acids, carbohydrates, fats, vitamins, minerals, and water, which are determinants of health and diseases in human populations. Cultural and psychosocial influences on food selection and habits are studied as well as respiration, metabolism and the digestive process. The latest nutrition and diet information, and contemporary nutrition issues will also be studied in this comprehensive program.

## (3 lec/0 lab)

3 sem hrs

## BIO 250 Microbiology

This course focuses on the biology of microorganisms including their morphology, genetics, metabolism, evolution and ecology. Human-microbe interactions in health and disease are emphasized. Scientific methodologies and current issues in microbiology are addressed. Students develop laboratory skills for safe handling, isolation, observation, and identification of microorganisms.
Recommended Prereq: BIO120 strongly recommended.
(3 lec/3 lab) 4 sem hrs

## BIO 260 Human Structure and Function

This study of the human body and how it works begins with basic scientific and biological principles necessary to understand human anatomy and physiology and progresses through a brief study of all body systems. Laboratory sessions provide the opportunity to identify anatomical structures on models and skeletal materials.
(3 lec/2 lab)
4 sem hrs

## BIO 262 Neuro-musculoskeletal Systems

This course is a study of the interrelatedness of the nervous, muscular and skeletal systems as well as the influence of the hormonal system, with a focus on muscle control and movement. The course provides the foundation for the study of biomechanics and incorporates the use of anatomical models and human cadaver laboratory experiences.
Recommended Prereq: BIO260; or BIO270 and concurrent enrollment in BIO272.
(2lec/2lab)
3 sem hrs

## BIO 264 Kinesiology and Pathology

This course is the study of the skeletal and muscular systems and their relation to movement, including an introduction to homeostatis and disease. The course focus begins with the study of the anatomical aspects of movement, with exploration of the pectoral girdle, shoulder joint and upper extremities, followed by a study of the pelvic girdle and lower extremities prior to an analysis of the trunk. A brief study of the biomechanical factors of posture and the pathological processes of the organ systems possibly encountered during treatments concludes this course.
Recommended Prereq: BIO262.
(2 lec/2 lab)

## 3 sem hrs

## BIO 270 Anatomy and Physiology I

This course begins with an orientation to the human body, followed by a brief review of basic biochemistry and the structure and function of cells. The student is then engaged in major units of study involving tissues, the skeletal, muscular and nervous systems and the special senses. Laboratory work utilizes models, microscopes, animal dissections, and human cadavers.
Note: First of a two-semester sequence. Recommended Prereq: High school biology and chemistry or the equivalents within the past five years. BIO120 strongly recommended.

## (3 lec/3 lab)

4 sem hrs

## BIO 272 Anatomy and Physiology II

Anatomy and Physiology II is a continuation of BIO 270. It includes study of the following body systems: endocrine, cardiovascular, lymphatic, immune, respiratory, digestive, urinary, and reproductive. The study of nutrition, metabolism, and fluid-electrolyte, acid-base balance is incorporated with appropriate organ systems. Laboratory work utilizes human cadavers, microscopic examination of tissues, animal organ dissection, models, and computer applications.
Note: Second of a two-semester series. Prereq: C or better in BIO270.
(3 lec/3 lab)
4 sem hrs

## BIO 296 Special Topics/Biology

This course offers in-depth exploration of a special topic, issue or trend in biological science, including specific studies in entomology, genetics, disease, human body, and ecology. Repeatable to a maximum of 24 semester hours for different special topics; 6 semester hours may apply to a degree or certificate.
(0 to $6 \mathrm{lec} / 0$ to 12 lab )
1 to 6 sem hrs

Course Descriptions

## Business <br> Administration (BUS)

See also Finance and Banking (FIN),
Management (MGT) and Marketing (MKT).
See also Business Mathematics (MTH 104) and
Industrial Organizational Psychology (PSY 245).

## BUS 100 Introduction to Business

This course provides the foundation for developing concepts, attitudes and philosophies about business operations. The following topics are introduced: management, marketing, accounting, finance, securities markets, economics, ethics and social responsibility, human resources, advertising and promotion, distribution and international business.
(3 lec/0 lab)
3 sem hrs

## BUS 130 Customer Service

This customer service course introduces students to a variety of skills including identifying customer behavior, determining customer needs through active listening, becoming an effective verbal and nonverbal communicator, honing telephone customer service skills, handling difficult customers, encouraging customer loyalty and practicing service recovery.

## (3 lec/0 lab) <br> 3 sem hrs

## BUS 140 Introduction to Entrepreneurship

This course exposes students to the entrepreneurial experience and perspective, the role of entrepreneurship and its impact on organizations of all types and society-atlarge. Included are case studies of both failed and successful ventures and a look at current economic needs and trends.
(3 lec/ lab)
3 sem hrs

## BUS 207 Business Statistics

This introductory course consists of statistical methods applied in the business environment. Topics include: the collection and presentation of data, measures of central tendency, dispersion, probability, sampling theory, correlation and regression. Students are introduced to at least one computer software package for statistical analysis. Prereq: C or better in MTH070 or MTH072; or placement assessment.
IAI: BUS 901.
(3 lec/0 lab)
3 sem hrs

## BUS 210 Legal Environment of Business

This business administration transfer course covers the legal environment in which business and society function. Emphasis is on the judicial system, government regulations, employment and labor law, and the evolving international legal system. These topics are presented within an ethical, social and political framework. Recommended Prereq: BUS100.

## (3 lec/0 lab) <br> 3 sem hrs

## BUS 211 Business Law

This course provides a basic understanding of the principles of law relating to the sources of law, court systems, litigation, contracts and sales, employment law and antitrust. Recommended Prereq: BUS100.

## (3 lec/0 lab)

3 sem hrs

## BUS 215 Business Ethics

This course introduces students to the fundamentals of ethics in the workplace. It explores ethical dilemmas pertaining to a variety of aspects of organizational life. The purpose is to provide students with a framework for ethical reasoning, ethical arguing, ethical decision making, and understanding ethical policies and behaviors. Recommended Prereq: BUS100.
(3 lec/0 lab) 3 sem hrs

## BUS 220 Leadership in Business

Leadership has transcended the executive level of organizations and has been identified as a necessary skill for individuals working within teams, task forces and work units at all levels. This course integrates fundamental leadership principles and the operation of a business organization. The emphasis is on skill development based on research and experience. Recommended Prereq: BUS100.
(3 lec/0 lab) 3 sem hrs

## BUS 225 Organizational Behavior

This course explores the study of individual behavior and group dynamics in organizations. Psychosocial, interpersonal and behavioral dynamics are considered within the variable framework of jobs, work design, communication, performance appraisal, organizational design and structure.
(3 lec/0 lab)
3 sem hrs

## BUS 240 International Business

This course builds upon the economic concepts learned in the principles of economics courses and studies the operations of international businesses in global markets. It focuses on the economic and competitive forces as well as the cultural, political and legal forces of national business environments. It also addresses the forces of governments, financial institutions and monetary systems, labor, and consumers in the international business environment. Recommended Prereq: BUS100, ECN100, ECN110, ECN201, or ECN202.
(3 lec/0 lab)
3 sem hrs

## BUS 296 Special Topics/Business

This course offers in-depth exploration of a special topic, issue or trend in the business field. Topics might include current events' impact (economic or technical) on business. Repeatable to a maximum of 12 semester hours for different special topics; 6 semester hours may apply to a degree or certificate.
(1 to 3 lec/0 lab)
1 to 3 sem hrs

## Chemistry (CHM)

## CHM 100 Introduction to Chemistry

This introduction to the basic concepts of general chemistry includes basic atomic structure, chemical symbols, formulas and equations, chemical equation calculations, phases of matter, algebraic manipulations, molecular structure, solutions and solution chemistry.
Note: Students enrolling in CHM100 are not required to enroll in CHM101 (lab). However, those students needing a 4 semesterhour lab science for transfer purposes may wish to concurrently enroll in CHM100 and CHM101. This course is not intended for majors in the physical sciences, students with previous chemistry or students with credit in CHM121.
Prereq: C or better in RDG070 or placement determined by asessment.

IAI: P1 902.
(3 lec/0 lab)
3 sem hrs

## CHM 101 Introduction to Chemistry Laboratory

This is a beginning laboratory course for those students with no previous laboratory experience. It is designed to acquaint the student with lab safety, various basic lab skills and techniques, some computer-assisted labs with their techniques and basic theory. Recommended Coreq: CHM100.
IAI: P1 902L.
(O lec/3 lab) 1 sem hrs

## CHM 102 Introduction to Organic Chemistry

This beginning course in organic chemistry includes the structure and reactions of functional groups, with further applications in biochemistry. It is designed to follow
CHM100 and to provide a one-year sequence of chemistry.
Recommended Prereq: CHM100 or consent of instructor.

IAI: P1 904.
(3 lec/0 lab)
3 sem hrs

## CHM 103 Introduction to Organic Chemistry Laboratory

This introductory laboratory for organic chemistry and biochemistry is designed to accompany CHM102.
Recommended Prereq: CHM100; CHM101.
Prereq: CHM102 or concurrent enrollment.
IAI: P1 904L.
(0 lec/3 lab)
1 sem hrs

## CHM 121 General Chemistry

This basic course in the principles of chemistry emphasizes chemical calculations and structure with laboratory. It is recommended for science and professional majors.
Recommended Prereq: High school chemistry or equivalent. Prereq: MTH070 or MTH072;
or placement by assessment and C or better in RDG070 or placement determined by asessment.
IAI: P1 902L, CHM 911.
(3 lec/3 lab) 4 sem hrs

## CHM 122 Chemistry and Qualitative Analysis

This continuation of CHM121 emphasizes solution equilibrium chemistry, including gases, precipitation, acid/base, coordination chemistry and oxidation-reduction, culminating with the Nernst equation. It also includes thermodynamics and kinetics.
Recommended Prereq: C or better in MTH070 or MTH072 or placement by math assessment; high school chemistry. Prereq: CHM121.
IAI: CHM 912.
(3 lec/3 lab)
4 sem hrs

## CHM 202 Biochemistry

This course introduces students to the chemistry of biologically active molecules including sugars, proteins, amino acids and nucleic acids. In addition, metabolic pathways of carbohydrates and fats are discussed as well as molecular genetics and respiration.
Prereq: C or better in CHM102 or CHM231.
(3 lec/0 lab)
3 sem hrs

## CHM 231 Organic Chemistry I

This course is a study of the fundamental aspects of organic chemistry, including structure, classification of organic reactions and reactions of functional groups.
Prereq: CHM121 and C or better in CHM122.
IAI: CHM 913.
(3 lec/3 lab)
4 sem hrs

## CHM 232 Organic Chemistry II

This course is a continuation of the study of the fundamental aspects of organic chemistry with emphasis on the reactions mechanisms and spectra of functional groups.
Prereq: C or better in CHM231.
IAI: CHM 914.
(3 lec/3 lab)
4 sem hrs

## Chinese (CHN)

## CHN 101 Elementary Chinese I

This is an introductory course in standard, modern Mandarin Chinese and includes pronunciation, idiomatic expressions, speech patterns and characters for the beginning student. Emphasis is placed on learning the four basic skills of listening, speaking, reading and writing.
(3 lec/0 lab)
3 sem hrs

## CHN 102 Elementary Chinese II

This course is a continuation of CHN101 for learning standard, modern Mandarin Chinese. Emphasis is placed on increased accuracy and proficiency in listening, speaking, reading and writing skills.
Recommended Prereq: CHN101 or one year of high school Chinese or its equivalent.
(3 lec/0 lab)
3 sem hrs

## College <br> Success Topics (COL)

NOTE: A maximum of 4 semester hours of College Success Topics (COL) course credit may be counted toward degree requirements for any associate degree.

## COL 100 Great Beginnings: College Life and Success

This course focuses on learning about and utilizing college resources, developing the skills needed for college success, and increasing self-awareness and self-discipline. This course is meant to provide students a meaningful experience, connect them with a peer support system, and assist them in their college and life journey.
(2 lec/0 lab)
2 sem hrs

## COL 101 Strategies for Success

This course examines principles and strategies that empower students to be successful personally, academically, and professionally.
(2 lec/0 lab)
2 sem hrs

## COL 102 Research Strategies

This course introduces students to research skills that enable them to effectively discover information in a variety of formats, and to categorize, differentiate, examine, question, analyze, organize and share information in their academic, professional and personal lives.
(1 lec/0 lab)
1 sem hrs

## COL 105 Money Matters

This course is focused on teaching adults how to create a financial plan to realize goals, such as graduating from college or maintaining good credit for future home or car loans. Students will learn how to avoid credit trouble, save and invest money, stay out of bad debt, and pay for college. Students will also learn how to protect themselves from fraud and identity theft.
(2 lec/0 lab)
2 sem hrs

## COL 110 Leadership Studies

This course is designed to provide emerging and existing leaders the opportunity to explore the concept of leadership and to develop and improve their leadership skills. The course integrates readings from the humanities, experiential exercises, films and contemporary readings on leadership.
(3 lec/0 lab)
3 sem hrs

## COL 131 Strategies for Career Exploration

This career exploration course is designed to help people make career decisions based on in-depth personal assessment including career interests, personality type and values inventories.

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(1 lec/0 lab)
1 sem hrs
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## Communications (COM)

## COM 100 Fundamentals of Speech Communication

This basic course in speech communication serves three primary goals: introduction to the theories of human communication, classroom experiences in a variety of communication situations, and evaluation of individual communicative behavior.

IAI: C2 900.
(3 lec/0 lab)
3 sem hrs

## COM 110 Voice and Diction

Clarity of speech, articulation, accurate pronunciation, effective choices of words, effective use of vocal pitch, rate, and volume make up the core of this course. Incorporated in the study is a basic understanding of the vocal mechanism, phonation and breath control. The International Phonetic Alphabet is also a component of the course and compliments the vocal training.
(3 lec/0 lab)
3 sem hrs

## COM 115 Digital Communication

This course provides an introduction to fundamental dimensions of computer-mediated communication (CMC). Basic principles of effective communication are integrated with the identification of the common language, modes, strengths and limitations inherent to CMC. Consideration of aspects of diversity, culture, ethics, ambiguity and effectiveness are applied to the contexts of interpersonal, group, workplace and e-commerce (global) communication situations.

## (3 lec/0 lab) <br> 3 sem hrs

## COM 120 Interpersonal Communication

This course is a study of interpersonal communication with emphasis on the communication process, self perception, self expression, verbal and nonverbal communication, and listening behavior. Students also study interpersonal relationships and conflict resolution.

## IAI: MC 901 (Approval Pending)

## (3 lec/0 lab)

3 sem hrs

## COM 121 Communication in the Workplace

This course develops effective communication skills for a variety of business situations and professional settings. Areas of emphasis include oral presentations for the business person, communicating in a multicultural work setting, verbal and nonverbal communication principles, interviewing, persuasion, group communication and participation, communication with customers, creating positive communication climates, and conflict resolution.

## (3 lec/O lab)

3 sem hrs

## COM 122 Group Communication

This course studies the theories and research explaining small group behavior and provides practical experience working in problemsolving and decision-making groups. Areas of emphasis include interpersonal communication, group leadership, individual roles, norms, phases of group development, decision-making processes and conflict resolution methods.
(3 lec/0 lab)
3 sem hrs

## COM 125 Communication Strategies for Health Care Careers

This course explores the theory and practice of selected health-related models of communication for individuals in the health care field. Verbal and non-verbal communication in professional-client, professional-professional, and family relationships is stressed. Conflict resolution, informed consent, ethical responsibility, and effective intercultural communication are also emphasized. This course is designed for individuals interested in a career as a medical assistant, phlebotomist, registered nurse, licensed practical nurse, nurse assistant, or other health care fields.
Note: COM125 cannot be substituted for other communication courses required in a degree or certificate.
(2 lec/0 lab)
2 sem hrs

## COM 135 Introduction to Integrated Marketing Communications

Students in this course explore the theory and practice of advertising with special focus on its role in integrated marketing communication. Topics include consumer behavior, market research, communication planning, creative strategies and types of media. Students prepare an original advertising campaign from market/ product research to client presentations.
IAI: MC 912.
(3 lec/0 lab)
3 sem hrs

## COM 150 Intercultural Communication

This course introduces students to the study of communication and culture. Students examine their own cultural identity and how it influences communication with others. Theories and concepts related to communication and culture are discussed including values, beliefs, norms, linguistic and nonverbal differences between cultures, cultural bias, ethnocentrism, globalization, and cultural adjustment. Moreover, major theories of intercultural communication will be discussed to help students build communication skills to improve intercultural communication, manage conflicts successfully and build intercultural relationships.
Recommended Prereq: COM100; ENG101.
IAI: MC 904 (Approval Pending)
(3 lec/0 lab)

## COM 200 Advanced Speech Communication

Building on the skills developed in Fundamentals of Speech Communication (COM 100), this course provides advanced skill development in the art of speechmaking. An additional focus is on rhetorical backgrounds in public speaking to contextualize what is commonly seen in public address.
Prereq: COM100.
(3 lec/0 lab)
3 sem hrs

# Computer Aided Design and Drafting (CAD) 

## CAD 100 Technical Drawing I

This course includes study and practice in technical drawing through the development of technical sketching, dimensioning and tolerancing, multi-view projection, pictorial drawing, section view, auxiliary view, revolutions, intersections and development, working drawings and drawing reproduction. Recommended Coreq: CAD102.
(2 lec/2 lab)
3 sem hrs

## CAD 102 AutoCAD I

This course introduces computer aided drafting using AutoCAD to set up drawings and add lines, circles, arcs, other shapes, geometric constructions, and text. Students use display and editing techniques to obtain information about their drawings and work with drawing files. This course examines basic dimensioning concepts. Repeatable to a maximum of 12 semester hours; 3 semester hours may apply to a degree or certificate.
Note: It is recommended students have PC experience with MS Windows and basic keyboarding skills.
Recommended Coreq: EGR101.

## (2 lec/2 lab) <br> 3 sem hrs

## CAD 118 Technical Drawing II

This course is designed to build on the skills acquired in the Technical Drawing I course. Students will study, practice and learn to create advanced geometric constructions, threads and fastening devices, cams, gears, splines, drawing management, manufacturing processes, assembly drawings, and an introduction into architectural, electrical and welding drawings. Recommended Prereq: CAD100 or consent of instructor.
Recommended Coreq: CAD120.
(2 lec/2 lab)
3 sem hrs

## CAD 120 AutoCAD II

This course is designed to build on the skills acquired in the AutoCAD I course. Students learn how to properly create and detail orthographic views with both conventional and geometric tolerances, and to annotate working drawings according to ANSI standards Additional topics of study include: dynamic blocks, block attributes, external reference files, assembly layouts, bill of materials, fasteners and weldments. Repeatable to a maximum of 12 semester hours; 3 semester hours may apply to a degree or certificate.
Recommended Prereq: CAD 100 and CAD102. Recommended Coreq: CAD118.
(2 lec/2 lab)
3 sem hrs

## CAD 122 Geometric Dimensioning and Tolerancing

This course introduces the student to the principles of geometric dimensioning and tolerancing. Topics include part dimensional control techniques, interchangeability of parts, and the differences between traditional dimensioning and geometric dimensioning. Symbols and terms for dimensioning datum and material condition symbols are studied Various tolerances of form, profile, orientation run-out and location are demonstrated. Feature control frames are discussed. The student is expected to interpret all geometric tolerances and dimensions from a print of intermediate complexity.
Recommended Coreq: CAD102, EGR101.
(2 lec/0 lab)
2 sem hrs

## CAD 240 Introduction to Parametric Modeling Using SolidWorks

Using SolidWorks software, this course focuses on 3D solid parametric modeling in an engineering design environment. Hands-on learning in basic sketch profiles with constraint based 2D shape control is studied. Part design, Boolean operations, placed features, parametric features, dimensions and constraints, design modification of solid part, analyzing and documentation of the part or parts are also covered. Bi-directional control of 3D model to 2 D part drawing is studied. The use of rapid prototyping techniques for model creation and design, analysis and redesign are incorporated. Repeatable to a maximum of 12 semester hours; 3 semester hours may apply to a degree or certificate.
Prereq: CAD102 or EGR101.
(2 lec/2 lab)
3 sem hrs

## CAD 241 Introduction to Parametric Modeling Using Inventor

Using Inventor software, this course focuses on 3D solid parametric modeling in an engineering design environment. Hands-on learning in basic sketch profiles with constraint based 2D shape control is studied. Part design, Boolean operations, placed features, parametric features, dimensions and constraints, design modification of solid parts, analyzing and documentation of the part or parts are also covered. Bi-directional control of 3D model to 2 D part drawing is studied. The use of rapid prototyping techniques for model creation and design, analysis and redesign are incorporated. Recommended Prereq: CAD185. Prereq: CAD102 or EGR101.
(2 lec/2 lab)
3 sem hrs

## CAD 242 Advanced Parametric Modeling Using SolidWorks

This course uses local and global parameters in the area of 3D parametric solid modeling with SolidWorks software. Students learn to control parts with design variables, 3D constraints, variable dimensions, table driven parts, mathematical operators and adaptive technology. Assembly constraints are placed on components that are linked to one another, and the overall engineering design process through the revision process is addressed. The effective use of global parameters in managed assemblies, control of the assembly, interference checking, design elements and documentation of the assembly is examined, and rapid prototyping design creation and engineering analysis of models are included. Repeatable to a maximum of 12 semester hours; 3 semester hours may apply to a degree or certificate. Prereq: CAD240.
(2 lec/2 lab)
3 sem hrs

## CAD 243 Advanced Parametric Modeling Using Inventor

This course introduces the use of local and global parameters in the area of 3D parametric solid modeling with Inventor software. Students learn to control parts with design variables, 3D constraints, variable dimensions, table driven parts, mathematical operators and adaptive technology. Assembly constraints are placed on components that are linked to one another, and the overall engineering design process through the revision process is addressed. The effective use of global parameters in managed assemblies, control of the assembly, interference checking, design elements and documentation of the assembly is examined, and rapid prototyping design creation and engineering analysis of models are included.
Prereq: CAD241.
(2 lec/2 lab)
3 sem hrs

## CAD 270 Product Design and Development

This project based course focuses on the product design process from conception through prototype modeling and testing. Recommended Prereq: CAD240; CAD241; or consent of instructor. Prereq: CAD120.
(3 lec/0 lab)
3 sem hrs

## Computer Information Systems (CIS)

See also World Wide Web (WEB).

## CIS 105 Introduction to Windows

This introduction to a graphical interface software package emphasizes the Windows environment, manipulation of taskbar, file maintenance and folder manipulation. Repeatable to a maximum of 3 semester hours; 1 semester hour may apply to a degree or certificate.

## (. 5 lec/1 lab) <br> 1 sem hrs

## CIS 106 PowerPoint and Publisher for Business

This course is an introduction to designing, preparing and delivering electronic business presentations using presentation graphics software. Students will also learn to use desktop publishing software to create a variety of promotional material such as tri-fold brochures, newsletters, cards and business cards.

## Recommended Prereq: CIS105.

(3 lec/0 lab)
3 sem hrs

## CIS 108 Comprehensive Word Processing

Fundamental through expert applications of features, commands, and functions of Microsoft Word are included to help users enhance productivity and develop more vibrant documents. The course prepares students to produce word documents and templates emphasizing commonly used commands and strategies for formatting, editing and revising text. Repeatable to a maximum of 9 semester hours; 3 semester hours may apply to a degree or certificate.
Recommended Prereq: CIS105.

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(3 lec/0 lab) 3 sem hrs
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## CIS 110 Business Information Systems

This introductory computer course emphasizes technology literacy for the purposes of enhancing business decision making, providing business intelligence, and improving organizational efficiency and effectiveness. Students will find the course topics and skills learned useful in their current and future academic and business careers. Microsoft Office technologies are used for common desktop applications, and a variety of tools are used for Web applications.
Note: Hardware Requirements: PC; not compatible with MAC; Software
Requirements: 2016 Word, Excel, Access, and PowerPoint for PC.
IAI: BUS 902.
(3 lec/0 lab)
3 sem hrs

## CIS 111 Introduction to Excel Spreadsheet

This introductory electronic spreadsheet course emphasizes creating, modifying, designing and manipulating spreadsheet models and charts. Database concepts of spreadsheet software and working with multiple workbooks are introduced. Repeatable to a maximum of 4.5 semester hours; 1.5 semester hours may apply to a degree or certificate.
Note: Students will not receive credit toward a degree or certificate for both CIS111 and CIS112.
Recommended Prereq: CIS105.
(1 lec/1 lab)
1.5 sem hrs

## CIS 112 Comprehensive Excel Spreadsheet

This electronic spreadsheet course emphasizes designing, formatting and modifying worksheet models and charts. Included are integration features of charting, word processing, database and macros. Repeatable to a maximum of 9 semester hours; 3 semester hours may apply to a degree or certificate.
Note: Students will not receive credit toward a degree or certificate for both CIS111 and CIS112.
Recommended Prereq: CIS105.
(3 lec/O lab)
3 sem hrs

## CIS 113 Introduction to Access Database

This beginning course uses relational database management software on microcomputer systems. Students design, build and maintain relational databases while learning to integrate databases with other software applications. Repeatable to a maximum of 4.5 semester hours; 1.5 semester hours may apply to a degree or certificate.
Note: Students will not receive credit toward a degree or certificate for both CIS113 and CIS114.
Recommended Prereq: CIS105.
(1 lec/1 lab)
1.5 sem hrs

## CIS 114 Comprehensive Access Database

This comprehensive course focuses on understanding relational database management software on microcomputer systems. Students design, build and maintain relational databases while learning to integrate databases with other software. Also included is an introduction to concepts of programming language for database applications with emphasis on the fundamentals of event-driven programming techniques. Repeatable to a maximum of 9 semester hours; 3 semester hours may apply to a degree or certificate.
Note: Students will not receive credit toward a degree or certificate for both CIS113 and CIS114.
Recommended Prereq: CIS105.
(3 lec/O lab) 3 sem hrs

## CIS 115 Introduction to Programming

This course is an introduction to the program development process with emphasis on problem-solving and algorithm development using various programming languages. Students write, document and test approximately 10 to 12 programs in both interactive and batch modes of processing. Programs involve use of procedures, functions, and data abstraction; selection, sequence and repetition structures; arrays; objects and file-based input/output operations. Emphasis is placed on structured program design and style.
Recommended Prereq: MTH070 or MTH072. Recommended Coreq: CIS116.

## (3 lec/0 lab)

3 sem hrs

## CIS 116 Structured Program Design

This course provides an introduction to development of programming logic and algorithms using structured program design techniques. Students solve problems using decision and loop structures and learn modularization principles. They analyze and implement data structures such as arrays, linked lists, stacks, queues and binary trees. They study and apply Object Oriented Principles, and develop logic in pseudocode, flowcharts and UML.
Recommended Coreq: CIS115.
(3 lec/0 lab)
3 sem hrs

## CIS 120 VB.NET Programming

A disciplined approach to event-driven programming in a Graphical User Interface (GUI) environment, this course emphasizes problem solving and algorithm development using the Visual BASIC.Net programming language. Students write, document and test programs using structured procedures and data abstraction, selection, sequence and repetition structures, arrays, data validation and exception handling, the use of multiple forms, and file and database input/output operations. Emphasis is on interface and program design enhanced through extensive laboratory time. Prereq: CAD 102 or consent of instructor. (2 lec/2 lab) 3 sem hrs

## CIS 130 C++ Programming

This introductory course in C++ programming includes object-oriented, event-driven, interactive programming techniques. Topics include data types, pointers, arrays, stacks, recursion, string processing, searching and sorting algorithms, classes and objects, references and memory addresses, scope, streams and files, and graphics. A wide variety of business-oriented problems are solved by writing C++ programs.
Recommended Prereq: CIS115.
IAI: CS 911.
(2 lec/2 lab)
3 sem hrs

## CIS 136 Data Science Programming

This course is an introduction to data science programming using the R programming language. The course is for the student who expects to have hands-on R programming skills and wishes to use it for effective data analysis. Topics include importing, cleaning and exporting data, accessing subsets of data, accessing R packages, plotting and graphing, using control structures, using functions, debugging and programming for data analysis projects.
Recommended Prereq: MTH070 or MTH072.
(3 lec/0 lab) 3 sem hrs

## CIS 142 JavaScript Programming

This course is designed to introduce the student to JavaScript. Concepts and techniques include integrating HTML with JavaScript, creating pop-up windows, adding scrolling messages, enhancing image and form objects, working with cookies, among others. Students are also exposed to AJAX applications.
Recommended Prereq: WEB110; CIS115.
(2 lec/2 lab)
3 sem hrs

## CIS 145 C\#.NET Programming

This introductory course in C\#.NET (C-Sharp), an object oriented programming language, introduces the .NET platform, the .NET framework library, object oriented software design, control structures, arrays, methods, GUI programming, string processing, files and database programming and topical subjects, such as Web Service Programming, XNA Game Programming and Mobile Device Programming. The emphasis is on building a programming foundation that allows students to take advanced programming object oriented classes using C\#.NET, to develop business applications using C\#.NET, and to develop internet applications, database driven applications, video games and mobile device applications.
Recommended Prereq: CIS115.
IAI: CS 911.
(3 lec/0 lab)
3 sem hrs

## CIS 150 Java Programming

This course introduces the concepts of objectoriented programming with an emphasis on programming using Java. Recommended Prereq: CIS115; WEB110.
IAI: CS 911.
(3 lec/0 lab)
3 sem hrs

## CIS 170 Networking Essentials

Designed for the beginning network administration student, this course covers basic network fundamentals including standard design principles, common network devices, common network operating systems and topologies, and network management issues.
(3 lec/O lab)
3 sem hrs

## CIS 173 Introduction to TCP/IP Internetworking

Designed for the beginning network administration student, this course covers basic TCP/IP fundamentals including, IP utilities, name resolution, remote access, sub-netting, IP routing, WINS, DNS server, DHCP and troubleshooting issues. Repeatable to a maximum of 8 semester hours; 2 semester hours may apply to a degree or certificate. Recommended Prereq: CIS170.
(1.5 lec/1 lab) 2 sem hrs

## CIS 174 Wireless Local Area Networking

This course provides a hands-on introduction to Wireless Local Area Networking (WLANs), including the design, planning, implementation, operation and troubleshooting of WLANs. The course also provides a comprehensive overview of the technologies, security and design of WLANs. Repeatable to a maximum of 8 semester hours; 2 semester hours may apply to a degree or certificate.
Recommended Prereq: CIS170.
(2 lec/O lab)
2 sem hrs

## CIS 175 Windows Professional Administration

This course offers an introduction and examination of the architecture and features of Microsoft Windows Professional. Repeatable to a maximum of 6 semester hours; 3 semester hours may apply to a degree or certificate. Recommended Prereq: CIS105.
Recommended Coreq: CIS170 or CIS176.
(3 lec/0 lab)
3 sem hrs

## CIS 176 Windows Server Administration

This course provides a hands-on introduction and examination of the architecture and features of Windows Server. Repeatable to a maximum of 6 semester hours for version updates; 3 semester hours may apply to a degree or certificate.
Recommended Prereq: CIS170 or concurrent enrollment.
(3 lec/0 lab)
3 sem hrs

## CIS 180 Linux/UNIX Operating System

This course builds a thorough understanding of the Linux/UNIX operating system. Topics include: the role Linux/UNIX plays in today's operating systems and Internet market, use of utility commands, navigation of file system structure, VI editor, programming the Korn Shell, Linux/UNIX internals including process management, Linux/UNIX networking elements including file system structure, and Linux/UNIX tools to compile software such as C and C++.
(3 lec/0 lab)
3 sem hrs

## CIS 181 Introduction to Information Systems Security

This introductory course is intended for the information systems and networking student. It covers an introduction to the principles of information security, including: the need for security systems; legal, ethical and professional issues; risk management; security planning; physical security; and technology, implementation and maintenance issues. Recommended Prereq: CIS170.
(3 lec/0 lab)
3 sem hrs

## CIS 185 Game Design

Students learn the tasks involved in the game development cycle and create game design documents. Game concepts and worlds, storytelling, character and user interface design, core mechanics and balance are examined. While learning how to design their own game, the students discuss, analyze and implement design techniques. In addition, students discuss the major game genres and identify the design patterns and unique creative challenges that characterize them. Repeatable to a maximum of 12 semester hours; three semester hours may apply to a degree or certificate.
(2 lec/2 lab)
3 sem hrs

## CIS 186 Game Development

This introductory course in Game Development includes object-oriented, event-driven, interactive programming techniques. Students write various 2-D games. Topics include sprite creation and manipulation, and working with physics, as it relates to games. Various genres of games are discussed and developed, including serious games. Emphasis is placed on good game design and game play. Repeatable to a maximum of 12 semester hours; three semester hours may apply to a degree or certificate.
(2 lec/2 lab)
3 sem hrs

## CIS 202 Database Management

This course discusses the relational database model and capabilities of standard DBMS packages. Students are guided through database design using normalization and data modeling using the entity-relationship model. Strong foundation is provided in the SQL language and database Access standards. Projects provide practical experiences designing, building, and updating a database.

## (3 lec/O lab) <br> 3 sem hrs

## CIS 203 Systems Analysis and Design

This course covers the functions and techniques of systems analysis, design and development, including the analysis of information flow, developing system specifications, and analyzing equipment needs. The traditional structured methodology and associated tools as well as the object-oriented approach are used throughout the analysis process, from initial investigation through installation and review.
Recommended Prereq: CIS110 or consent of division dean.
Recommended Coreq: CIS205.
(3 lec/0 lab)

## 3 sem hrs

## CIS 205 Information Technology Project Management

This course explains the foundations of project management - project integration, scope, time, cost, quality, human resources, communications, risk and procurement using the experiences of real-life businesses. Repeatable to a maximum of 12 semester hours; 3 semester hours may apply to a degree or certificate.
(2 lec/2 lab)
3 sem hrs

## CIS 220 Advanced VB.NET, ASP.NET

An in-depth study of advanced Visual BASIC. NET and ASP.NET concepts, this course includes database file processing, creating classes, understanding inheritance and polymorphism, and creating user controls. Students write complete, large, interactive systems involving ADO.NET objects to access databases, and ASP.NET based Web applications.
Recommended Prereq: CIS114; CIS120.
(2 lec/2 lab) 3 sem hrs

## CIS 230 Advanced C++

This class covers design and implementation of large-scale problems; abstract data types; data structures (files, sets, pointers, lists, stacks, queues, trees, graphs); program verification and complexity; recursion; dynamic concepts (memory, scope, block structures); text processing; and an introduction to searching and algorithms.
Recommended Prereq: CIS130 or consent of instructor.
IAI: CS 9121.
(2 lec/2 lab)
3 sem hrs

## CIS 250 Advanced Java

This class covers the design and implementation of large-scale problems; abstract data types; data structures (files, sets, pointers, lists, stacks, queues, trees, graphs); program verification and complexity; recursion; dynamic concepts (memory, scope, block structures); text processing; and an introduction to searching and sorting algorithms. Included also is internet application development using Java Servlets and JSP pages.
Recommended Prereq: CIS150 or consent of instructor.

## IAI: CS 912.

(3 lec/0 lab)
3 sem hrs

## CIS 252 Mobile Device Application Programming

Developing and programming mobile device applications using the Android operating system and Java programming language are introduced in this course. Students will have the information they need to create their own applications for mobile phones, tablets and other devices. Focus will be on the Android framework, user interface programming, location aware applications, network enabled applications and database applications. Recommended Prereq: CIS150.
(2 lec/2 lab) 3 sem hrs

## CIS 261 PHP Web Server Programming

This course introduces students to the PHP language and issues associated with writing applications on a Linux Web server. Topics covered include CGI programming and integrating database management software with applications on the Linux platform. Repeatable to a maximum of 9 semester hours; 3 semester hours may apply to a degree or certificate. Recommended Prereq: WEB110; CIS115.
(2 lec/2 lab)
3 sem hrs

## CIS 262 Advanced PHP

This course presents advanced PHP concepts such as design patterns, development frameworks and advanced database and objectoriented programming, along with web services and AJAX. CakePHP is used to demonstrate application development using a framework. Repeatable to a maximum of 9 semester hours; 3 semester hours may apply to a degree or certificate.
Recommended Prereq: CIS261; CIS202.
(3 lec/O lab) 3 sem hrs

## CIS 280 Linux/UNIX System Adminstration

This course is designed to teach students to set up and administer the Linux/UNIX operating system. Students will perform hardware and software installation and customization. Other topics covered include networking and installation and customization of web server related software. Repeatable to a maximum of 12 semester hours; 3 semester hours may apply toward a degree or certificate. Recommended Prereq: CIS180.
(3 lec/0 lab)
3 sem hrs

## CIS 296 Special Topics/ Information Systems

This course offers in-depth exploration of a special topic, issue or trend in the information systems field. Repeatable to a maximum of 12 semester hours for different special topics; 6 semester hours may apply to a degree or certificate.
(0 to 3 lec/0 to 6 lab) 1 to 3 sem hrs

# Construction <br> Management (CMT) 

## CMT 101 The Construction Industry

This survey course provides an introduction to the construction industry, including career paths in estimating, site supervision, project management, and the trades. Also addressed are related areas of design, engineering, inspection and planning. Commercial, heavy/ highway/infrastructure, industrial, institutional, and residential industry segments are explored.
(3 lec/0 lab)
3 sem hrs

## CMT 105 Print Reading for Construction

Civil, architectural and structural drawings commonly used in residential, light commercial buildings, industrial construction and land development are studied in this course. Plan views, elevations, sections, details and schedules are examined in depth.
Recommended Coreq: CMT111.
(3 lec/0 lab)
3 sem hrs

## CMT 111 Construction Materials and Methods I

This is a survey course of general building materials used in residential, commercial and other similar new construction and renovation projects. Physical characteristics and properties, manufacture and distribution are covered.
(3 lec/0 lab)
3 sem hrs

## CMT 115 Construction Materials and Methods II

This survey course introduces construction techniques and installation procedures in building construction. Subjects include earthwork, concrete, masonry, steel and wood construction in a variety of different project types and systems.
Recommended Prereq: CMT111.
(3 lec/0 lab)
3 sem hrs

## CMT 121 Sustainable Construction and Design Principles

Sustainable Construction and Design Principles is an introduction to sustainable design, building and remodeling. The elements and techniques of sustainable construction and design are explored. Students also review major state and national standards for sustainable building
(3 lec/0 lab)
3 sem hrs

## CMT 201 Codes, Contracts and Specifications

This course provides an introduction to local, state, national and international building codes and standards, including a survey of code organizations and relevant legislation. Contracts commonly used in the industry are studied, along with an overview of project specifications necessary to meet contract requirements.
Recommended Prereq: BUS210; CMT111.
(3 lec/0 lab)
3 sem hrs

## CMT 210 Construction Estimating

Construction estimating is covered, beginning with an understanding of the costs of labor, equipment and materials as well as profit and overhead. Quantity measurements of basic construction materials are used to develop bidding packages.
Recommended Prereq: CMT111; CMT115.
(3 lec/0 lab) 3 sem hrs

## CMT 215 Contract and Project Administration

This course studies principals and procedures of construction project administration from the differing viewpoints of an owner's project representative and that of a contractor's on various project types. Specifically addressed are issues relating to authority, liability and responsibility of each party.
Recommended Prereq: CMT115; CMT201.
(3 lec/0 lab) 3 sem hrs

## CMT 225 Construction Project Management

This course provides students with the knowledge required to plan, schedule and manage construction projects. Tools such as Gantt Charts, PERT and CP/M are discussed. Students apply electronic aids to assist in planning and scheduling a project. Basic total quality management, team building and change management techniques are also presented. Recommended Prereq: CMT210 or concurrent enrollment.
Recommended Coreq: CMT215.
(3 lec/0 lab)
3 sem hrs

## CMT 230 Construction Safety and Health

This overview of safety rules and procedures for working on construction sites includes general and company safety policies, construction site job hazards and procedures, and personal protective equipment needs and uses. It also includes lifting, ladder and scaffold procedures, hazards, communications requirements, and fire and electrical safety guidelines.
(3 lec/0 lab)
3 sem hrs

## CMT 240 Construction Surveying

This course presents the principles and methods for transferring engineering and architectural designs to the ground to enable timely and efficient construction of buildings and site improvements. Associated topics include the use and care of surveying instruments, differential leveling, traversing, calculations, coordinate geometry, and basic site design principles.
Recommended Prereq: CMT105.
(2 lec/2 lab)
3 sem hrs

## Criminal Justice (CRJ)

## CRJ 100 Introduction to Criminal Justice

This survey and analysis of the criminal justice system includes an historical and philosophical overview of the development, with special emphasis on the system's primary components and the relationship of these components in the administration of criminal justice in the United States.
Recommended Prereq: CRJ101.
IAI: CRJ 901.
(3 lec/0 lab) 3 sem hrs

## CRJ 101 Introduction to Corrections

This overview and analysis of the United States correctional system covers: history, evolution, and philosophy of punishment and treatment; operation and administration in institutional and non-institutional settings; and issues in constitutional law.
Recommended Prereq: CRJ100.
IAI: CRJ 911.
(3 lec/0 lab)
3 sem hrs

## CRJ 102 Criminal Justice Career Exploration

This course is designed to allow students to explore the various career choices within the criminal justice system. Emphasizing workrelated characteristics, job duties employment potential, and career trends, the course provides an overview of the day-to-day operations and activities of policing.
(2 lec/0 lab)
2 sem hrs

## CRJ 103 Criminal Justice Report Writing

This course provides criminal justice students with instruction and practice in the preparation of accurate police reports suitable for use in the courtroom. The development of a clear, concise, narrative writing style is emphasized, and weekly report writing exercises are critiqued. Prereq: ENG101 or concurrent enrollment.
(3 lec/0 lab) 3 sem hrs

Course Descriptions

## CRJ 105 Patrol Operations

This course introduces students to the police patrol function, focusing on the history of policing, the importance of communication, problem solving and tactics. Topics include law enforcement philosophies and theories, community policing, the importance of written and verbal communication in the patrol process, ethical considerations, officer safety and criminal investigation.
(3 lec/0 lab)
3 sem hrs

## CRJ 107 Juvenile Justice

This overview and analysis of the juvenile justice system in the United States covers the history and the philosophies of society's reaction to juvenile behavior and problems. Interaction among the police, judiciary, and corrections is examined within the context of cultural influences. Theoretical perspectives of causation and control are introduced.
Prereq: CRJ100.
IAI: CRJ 914.
(3 lec/0 lab)

## 3 sem hrs

## CRJ 115 Accident Investigation

This course provides a study of the evolution of vehicular and pedestrian traffic. The needs, trends and hazards of the driver, vehicle and roadway are examined. Students are introduced to the components of accident investigation with an emphasis on obtaining, recording and interpreting information to successfully reconstruct an accident scene. The course also includes the following topics: the application of traffic engineering, use of enforcement to solve traffic problems, the collection and interpretation of statistical data, and court testimony.

## (3 lec/0 lab)

3 sem hrs

## CRJ 120 The American Court System

This course studies the American criminal court system and its relationship with law enforcement and corrections. Focusing on the adult criminal court system, topics include the dynamics of the court system, the pivotal role the court plays in the criminal justice system, and the court's relationship with the juvenile justice system.
(3 lec/0 lab) 3 sem hrs

## CRJ $\mathbf{2 0 0}$ Criminal Investigation

This course introduces students to the fundamentals of criminal investigation. Topics include an examination of the preliminary and follow-up investigation, crime scene search, and collection and preservation of evidence. Interviewing witnesses and victims, interrogation of suspects, and rules governing the admissibility of evidence in court testimony are also covered.

## (3 lec/0 lab)

3 sem hrs

## CRJ 201 Crime Scene Investigation Laboratory

This course studies the collection and preservation of physical evidence. Emphasis is on reconstructing, sketching and photographing/videotaping crime scenes. Techniques such as plaster casting, fingerprinting and computer-assisted composite drawing are explored.
(2 lec/2 lab) 3 sem hrs

## CRJ 202 Drug Enforcement Investigation

This course offers a study of drugs, including drug abuse and criminal usage and their impact on society and enforcement agencies. Emphasis is on the detection, recognition and investigation of drugs. The history of drugs, psychological and physiological reactions, the law, identification of drugs, and the tactics and investigation of drug violations are also covered. (3 lec/O lab)

3 sem hrs

## CRJ 220 Criminal Law

This course examines and analyzes the structure and function of substantive criminal law and the principles of criminal law. The acts, mental state and attendant circumstances that are the necessary elements of crime are included.
Prereq: CRJ100.
(3 lec/0 lab)
3 sem hrs

## CRJ 226 Criminal Evidence

This course introduces the student to legal requirements as they relate to the rules of evidence, including testimony of witnesses, admissibility of evidence and effective court testimony.
(3 lec/0 lab)
3 sem hrs

## CRJ 230 Criminology

This course introduces students to the multidisciplinary study and analysis of the nature, causes and control of crime. The measurement of crime and the interactive roles of the system, victim and offender are studied.
Prereq: CRJ100.
IAI: CRJ 912.
(3 lec/0 lab)
3 sem hrs

## CRJ 235 Multicultural Law Enforcement

This course studies cultural diversity in America and its relationship with law enforcement. The content of the course includes the impact of diversity on law enforcement; cultural specifics for law enforcement; multicultural elements in terrorism and homeland security; law enforcement response strategies; and cultural effectiveness for law enforcement officers. Recommended Prereq: CRJ100.
(3 lec/O lab)
3 sem hrs

## CRJ 250 Ethics in Criminal Justice

This course explores moral, ethical and professional issues that are encountered in the criminal justice professions. Topics covered include the following challenges faced by criminal justice practitioners: excessive use of force, corruption and graft, bribery and gratuities, and diversity of cultures and values.
(3 lec/O lab)
3 sem hrs

## CRJ 260 Leadership <br> in Criminal Justice

This course studies the role of leadership in police organizations. The content includes leadership and command roles, employee satisfaction/dissatisfaction, problem employees, remediation, employee evaluations, discipline issues, deployment and conference facilitation. Recommended Prereq: CRJ100; CRJ105; CRJ250. (3 lec/0 lab)

3 sem hrs

## CRJ 296 Special Topics/ Criminal Justice

This course offers in-depth exploration of a special topic, issue or trend in the criminal justice field. Repeatable to a maximum of 12 semester hours for different special topics; 6 semester hours may apply to a degree or certificate.
(0 to $3 \mathrm{lec} / 0$ to 6 lab ) 1 to 3 sem hrs

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## Disability Studies (DIS)

## DIS 101 Disability in Society

It has been estimated that nearly 1 in 5 people over the age of 12 have a disability. This course is intended to give students working definitions of types of disabilities, as well as to provide an overview of various disability models and stereotypes. Students explore the experience of disability through case studies, guest speakers, and role play.
(3 lec/O lab) 3 sem hrs

## DIS 110 Perspectives on Disability

Over $20 \%$ of people in the United States are identified as having a disability. This course expands students' understanding of the impact of a disability throughout the lifespan. Topics include the history, economics, and geographical perspectives of disability, a study of disability in infancy, inclusion in education, adolescence, and adulthood.
Recommended Prereq: DIS101.
(3 lec/0 lab)
3 sem hrs

## DIS 296 Special Topics for Disability Studies

This course offers in-depth exploration of a special topic, issue or trend in the field of disability studies. Repeatable to a maximum of 12 semester hours for different special topics; 6 semester hours may apply to a degree or certificate.
(1 to 3 lec/0 lab)
1 to 3 sem hrs

## Early Childhood Education (ECE)

## ECE 101 Introduction to Early Childhood Education

Introducing students to the field of early childhood education, this course presents an overview of the philosophy, structure and organization of early childhood care and education in the context of appropriate practices. Students examine how their own personal qualities relate to the expectations of the field, and they study and observe developmentally appropriate practices in different types of early childhood programs. Students also review the state and federal regulations that govern early childhood programs.
(3 lec/0 lab)
3 sem hrs

## ECE 102 Career Explorations in Early Childhood

This course examines the responsibilities of an early childhood professional, including practical guidelines for providing care for preschoolaged children and their families. State and local requirements, guidance techniques, communication with parents, health, safety and nutrition, learning experiences and multicultural education are all discussed. (3 lec/0 lab)

3 sem hrs

## ECE 104 Infant and Toddler Development

Focusing on the development of children from prenatal to age three, this course studies prenatal development, the birth process, growth and development, health and nutritional needs, social and emotional needs, and language and cognitive development. The role of adults in enhancing infant and toddler development is explored, and current trends and research in areas such as brain development are covered. Field observations in infant and toddler programs are required as part of this course. Recommended Prereq: ECE101; ECE115.
(3 lec/0 lab)
3 sem hrs

## ECE 106 Guiding Young Children

This course offers a study of early childhood guidance theories and practices. Emphasis is placed on the identification and application of positive guidance methods and techniques for the young child's optimal development. Cultural and societal influences and the impact they have on a child's behavior are also explored. Recording and observing behavior of teachers and children is a strong component. Field observations are required.
Recommended Prereq: ECE101; ECE115.
(3 lec/0 lab) 3 sem hrs

## ECE 107 Development and Guidance of the School-Age Child

This course focuses on the principles and theories of the development of children between the ages of six and twelve. The use of effective guidance and interaction techniques with school-age children will be emphasized, and their implications for school-age child care and education programs will be discussed.

## (3 lec/0 lab)

3 sem hrs

## ECE 115 Child Growth and Development

This course provides a foundation in the theory and principles of child development from the prenatal through early adolescent stages. Students examine the theories of Piaget, Erikson, Vygotsky, Skinner and others in an in-depth study of children's physical, social, emotional, cognitive, language and aesthetic development. Emphasizing implications for early childhood education practice, child development is also explored in the context of gender, family, culture and society.
(3 lec/O lab)
3 sem hrs

## ECE 120 Health, Safety and Nutrition

This course explores the personal health of students and the health, safety and nutrition needs of children in group settings. Students examine the Illinois Department of Children and Family Services licensing standards, procedures for providing safe environments for children, assessment of children's health, and the nutritional requirements of children.
(3 lec/0 lab)
3 sem hrs

## ECE 125 Child, Family and Community

This course is a comprehensive study of the child as she/he relates to her/his family and community. Emphasis is on communication, diversity, professionalism and social policy. An in-depth study of community resources is included.
(3 lec/0 lab)
3 sem hrs

## ECE 130 Observation and Assessment

This course provides the framework for observing, documenting and assessing in the field of early childhood education. Various observation and assessment methods and strategies are explored and evaluated as they relate to the developing child and his/her culture and family. Extensive observation is a vital part of this course.
Recommended Prereq: ECE101; ECE115.
(1.5 lec/1 lab)

2 sem hrs

## ECE 140 Inclusion in Early Childhood: Birth Through Age Eight

This course provides students with the tools and skills to work with children with developmental differences. The focus of the course is on inclusion, including the identification of developmental differences; assessment and referral practices; the adaptation of curriculum and learning environments, and the development of community support and parent/teacher partnerships.
Recommended Prereq: ECE101, ECE115.
(3 lec/0 lab)
3 sem hrs

## ECE 145 Multiculturalism in Early Childhood

This course focuses on the implementation of cultural and anti-bias education with young children. Emphasizing the development of practical applications that balance classroom daily routines, curriculum and teaching strategies with the child's home culture, the course presents effective ways that teachers can assist children in learning to respect, appreciate and develop positive interactions with people different than themselves. Theories of multicultural education and the student's own cultural identity and attitudes toward others are explored.
Recommended Prereq: ECE101, ECE115.
(3 lec/0 lab) 3 sem hrs

## ECE 198 Curriculum for Early Childhood Programs

This course provides an overview of the planning, implementation and evaluation of developmentally appropriate curriculum. Early childhood curriculum models are introduced and such topics as lesson plans, classroom management strategies, scheduling, materials and equipment are covered.
Recommended Prereq: ECE115.
(3 lec/0 lab)
3 sem hrs

## ECE 204 Infant and Toddler Curriculum

This course prepares students to develop and implement an infant/toddler cuuriculum, including design of a developmentally appropriate learning environment. It examines teacher competencies necessary for working with infants and toddlers. Field observations are required.
Recommended Prereq: ECE101; ECE104; ECE115.
(3 lec/0 lab)
3 sem hrs

## ECE 207 School-Age Programming

This course examines the knowledge and skills needed to work effectively with the school-age child. Focusing on the planning, organization, assessment and implementation of developmentally appropriate activities, the course also explores the impact of cultural diversity on all aspects of care and education of the school-age child.
(3 lec/0 lab)
3 sem hrs

## ECE 210 Language Arts for the Young Child

This course offers a study of the language development of preschool children with specific emphasis on how language is acquired and used from ages 0-6. The course highlights developmental milestones in the child's language development. Attention is given to the selection and use of quality literature with young children.
Recommended Prereq: ECE198.
(3 lec/0 lab)
3 sem hrs

## ECE 215 Creative Activities for the Young Child

This course focuses on the theory and research related to the creative development of young children. Art and music resources that encourage children's creativity are also addressed.
Recommended Prereq: ECE198.
(3 lec/0 lab)
3 sem hrs

## ECE 220 Mathematics and Science for the Young Child

This course emphasizes the theory and developmentally appropriate practices, activities and materials for early childhood education, mathematics and science curricula. Recommended Prereq: ECE198.
(3 lec/0 lab) 3 sem hrs

## ECE 225 Play and Creative Expression for the Young Child

This course provides a study of different theories and types of play. The role of the teacher in modeling and facilitating play is explored. Choosing appropriate materials and equipment for play is emphasized.
Recommended Prereq: ECE115.
(3 lec/0 lab)
3 sem hrs

## ECE 230 Early Childhood Center Administration

This course offers a study of guidelines for the establishment of a child development center. Emphasis is placed upon the student's understanding of the written philosophy of a center and the program used by that center. Staffing, equipment and budgeting processes are studied. The expectations of the state licensing agency and other regulating agencies are examined.
Recommended Prereq: ECE101, ECE115.
(3 lec/0 lab)
3 sem hrs

## ECE 250 Early Childhood Education Practicum

This course combines a supervised, 240-hour fieldwork experience with on-campus group seminars. It is designed to provide students with the opportunity to apply the theories, principles and developmentally appropriate practices of early childhood education. Emphasis is placed on students' understanding and self-evaluation of their roles as teachers of young children and as members of a teaching team.
Recommended Prereq: Consent of instructor.
(1 lec/15 lab)
4 sem hrs

## ECE 296 Special Topics for Early Childhood Education

This course offers in-depth exploration of a special topic, issue or trend in the early childhood education field. Repeatable to a maximum of 12 semester hours for different special topics; 6 semester hours may apply to a degree or certificate.
(1 to 3 lec/0 lab)
1 to 3 sem hrs

## ECE 299 Early Childhood Education Administration Internship

Combining academic credit with professional experience, this internship allows students to learn about, observe and work in the early childhood education field. It provides students with the opportunity to apply leadership skills in a supervised, fieldwork experience, with emphasis placed upon students' understanding and self-evaluation of their roles as administrators of Early Childhood Education programs. The internship requires the completion of 300 contact hours of experience in an administrative role.
Prereq: Consent of instructor.
(0 lec/20 lab)
3 sem hrs

## Earth Science (ESC)

## ESC 100 Survey of Earth Science

This course is designed to provide an introduction to science, the earth sciences, and to acquaint the student with earth systems. Emphasis is on geology, meteorology, climatology, geomorphology and environmental change, with lesser emphasis on the principles of astronomy and oceanography.
Note: Students enrolling in ESC100 are not required to enroll in ESC101 (lab). However, those students needing a 4 semester-hour lab science for transfer purposes may wish to concurrently enroll in ESC100 and ESC101.

IAI: P1 905.
(3 lec/0 lab)
3 sem hrs

## ESC 101 Survey of Earth Science Laboratory

This course is designed to acquaint the student with the scientific method and earth systems. Emphasis is on topics related to geology, oceanography and meteorology, which are explored through selected laboratory exercises. Prereq: ESC100 or concurrent enrollment.

IAI: P1 905L.
(0 lec/2 lab)
1 sem hrs

## ESC 110 Climate and Global Change

This course is designed to provide an introduction to climate and to acquaint the student with the processes that govern global weather and climate conditions. The student will gain a general understanding of climate change, global warming, acid rain, ozone depletion, and desertification. Current theories regarding humankind's impact on climate are also emphasized.
IAI: P1 905.
(3 lec/0 lab)

## 3 sem hrs

## ESC 120 Introduction to Meteorology

This course is an introduction to Earth's atmosphere and the forces behind the weather. Topics include temperature, water vapor, cloud and precipitation formation, atmospheric stability, mid-latitude cyclones, weather forecasting, thunderstorms, tornadoes and hurricanes. A laboratory section includes weather observation and analysis techniques, using weather charts, diagrams and studying past storm events.
IAI: P1 905L
(3 lec/2 lab) 4 sem hrs

## ESC 125 Severe and Unusual Weather

This course provides an introduction into the weather phenomena that most severely impact society, including thunderstorms, tornadoes, hurricanes, winter storms, floods, drought, ENSO, and temperature extremes. Emphasis is placed on the methods for forecasting, detecting, monitoring, and mitigating the hazards associated with these atmospheric phenomena.
Prereq: RDG070 or by placement; MTH070 or MTH072 or by placement.
IAI: P1 905.
(3 lec/0 lab)
3 sem hrs

## ESC 130 Introduction to Oceanography

This course is designed to provide an introduction to oceanography by highlighting several components of the marine environment. Emphasis is on plate tectonics, oceanic circulation, the properties of seawater, waves and tidal action, coastal features and landforms, and oceanic habitats and their biota. Lesser emphasis is placed on marine sedimentation, the physiography of the ocean floor and general marine productivity.
IAI: P1 905.
(3 lec/0 lab)
3 sem hrs

## ESC 296 Special Topics/Earth Science

This course offers in-depth exploration of a special topic, issue or trend in earth science, including specific studies in geology, geography, oceanography, meteorology or any of their sub-disciplines. Repeatable to a maximum of 24 semester hours for different special topics; 6 semester hours may apply to a degree or certificate.
(0 to 6 lec/0 to 12 lab) 1 to 6 sem hrs

## Economics (ECN)

## ECN 100 Introduction to Economics

This is a survey course introducing students to the basics of both macroeconomics and microeconomics. Topics studied include: how markets work, competition, income distribution, fiscal and monetary policy, and the global economy.
Note: Not intended for students majoring in economics or business or for students with a minor in economics.
IAI: S3 900.
(3 lec/0 lab)
3 sem hrs

## ECN 201 Principles of EconomicsMicroeconomics

This course provides an introduction to basic economic principles and the principles of microeconomics. Topics covered include the behavior of the consumer; price theory and resource allocation; the behavior of the firm under different market conditions, including perfect competition and imperfect competition; antitrust policy; and the economics of the labor market.

IAI: S3 902.
(3 lec/0 lab)
3 sem hrs

## ECN 202 Principles of EconomicsMacroeconomics

This course provides an introduction to basic economic principles and the principles of macroeconomics. Topics include demand and supply; national income accounting theories; economic growth; economic fluctuations; income distribution; fiscal policy and public debt; money, banking and monetary policy; and international economics, including international trade and finance.

IAI: S3 901.
(3 lec/O lab)
3 sem hrs

## ECN 210 Global Economic Issues

This course involves the analysis of current socioeconomic issues by actively applying basic economic principles and the evaluation of policy solutions from an economic perspective. Topics may include: income distribution and poverty, labor markets, international trade, immigration, environmental policy, health care, and education.
Prereq: ECN100 or ECN201 or ECN202.
(3 lec/0 lab) 3 sem hrs

## ECN 296 Special Topics/Economics

This course offers in-depth exploration of a special topic, issue or trend in the economics field. Repeatable to a maximum of 12 semester hours for different special topics; 6 semester hours may apply to a degree or certificate.
(1 to 3 lec/0 lab)
1 to 3 sem hrs

## Education (EDU)

See also Mathematics (MTH) and Music (MUS) for additional courses for education majors.

## EDU 100 Strategies for the Paraprofessional Educator

This course provides an overview of the roles and responsibilities of a paraprofessional educator. Team building, instructional strategies, classroom management/organization techniques, diversity in the classroom, and the ethical and legal aspects of the role are considered. The student is also introduced to the ages and stages of child development and the field of special education.
(3 lec/0 lab)
3 sem hrs

## EDU 200 Introduction to Education

This course provides an introduction to the profession of teaching in the context of the American educational system. The historical, philosophical, social and legal foundations of education are introduced, and ethical issues in a diverse society, the organizational structure of school systems and school governance are examined.
Recommended Coreq: EDU202.
(3 lec/0 lab)
3 sem hrs

## EDU 202 Clinical Experience in Education

This 45-hour documented clinical experience allows students considering a career in teaching to observe and interact with children and teachers in classroom settings. Focused on the subject and age category in which the students are planning to teach, the clinical experience is planned, guided, and evaluated by a cooperating teacher and the college instructor. A weekly on-campus seminar explores such topics as effective teaching methods, classroom management techniques, and learning styles, and assists students in assessing their commitment to teaching as a career.
Note: To be approved for placement in the clinical experience, the student is required to pass and pay for a criminal background check. Also, the number of EDU202 Clinical Experience in Education transferable hours will be determined by the transfer institution. Recommended Coreq: EDU200.

## (1.5 lec/3 lab)

3 sem hrs

## EDU 205 Introduction to Technology in Education

This course introduces students entering the teaching profession to the knowledge and skills required to demonstrate proficiency in the current technology standards that have been established for educators. The course focuses on both knowledge and performance, and it includes hands-on technology activities. Recommended Prereq: Keyboarding; basic skill in word processing, spreadsheet and database programs.
(3 lec/0 lab)

## 3 sem hrs

## EDU 210 Educational Psychology

This course studies the psychological principles that provide the foundation for educational practice. The theories of cognitive and psychological development, human learning and motivation are discussed, with an emphasis on application for instruction and assessment. Learner-centered instruction and diversity issues are also addressed.
Recommended Prereq: PSY100.

## (3 lec/0 lab)

3 sem hrs

## EDU 220 Introduction to Special Education

This survey course introduces the historical, philosophical and legal foundations of special education. Topics include an overview of the characteristics of individuals with disabilities; a review of the provisions of the Individuals With Disabilities Education Act (IDEA) and its associated programs; and an examination of the diverse nature of exceptional populations, with an emphasis on the relationship between personal and student cultural perspectives.
Recommended Prereq: ECE115.
Recommended Coreq: EDU202.
(3 lec/0 lab)

## EDU 296 Topics/Issues for Education

This course offers in-depth exploration of a special topic, issue or trend in the field of education. Repeatable to a maximum of 12 semester hours for different special topics; 6 semester hours may apply to a degree or certificate.
(1 to 3 lec/0 lab)
1 to 3 sem hrs

## Electronics Technology (ELT)

## ELT 101 Introductory Electronics

This course introduces laboratory instruments, circuit components, basic measuring techniques and basic circuits used as building blocks in any electronic system.

## (3 lec/2 lab) <br> 4 sem hrs

## ELT 110 DC-AC Circuit Analysis

This course provides students with the basics of Direct Current (DC) and Alternating Current (AC) circuits. This is knowledge fundamental to all other electronics courses and is used by those working in the electronics field.
(3 lec/2 lab)
4 sem hrs

## ELT 120 Introduction to Solid State Devices

This course provides an introduction solid state devices. The topics covered are those most essential for modern technicians working in the electronics field.
Recommended Prereq: ELT110.
(3lec/2lab)
4 sem hrs

## ELT 235 Microprocessors

This course provides students with a practical working knowledge of microprocessors and microcontrollers. This in turn prepares students to work on a wide variety of electronics systems that range from electronic appliances to automobiles and sophisticated robotic systems. Recommended Prereq: ELT110.

## (3 lec/2 lab)

4 sem hrs

## ELT 296 Special Topics/Electronics

This course offers in-depth exploration of a special topic, issue or trend in the electronics field. Repeatable to a maximum of 12 semester hours for different special topics; 6 semester hours may apply to a degree or certificate.
(0 to 3 lec/0 to 6 lab)
1 to 3 sem hrs

## Emergency Medical Technician (EMT)

## EMT 100 Introduction to Community Paramedic

Introduction to Community Paramedic examines the work of community paramedics as members of a distinct community that works in collaboration with local Public Health agencies in order to assess and evaluate community services and systems in order to identify gaps in services between the community and healthcare systems and services. The Community Paramedic navigates and establishes systems to better serve citizens. They are trained as direct service providers which will ensure basic and advanced levels of care appropriate to prevention, emergencies, evaluation, triage, disease management, and basic oral and mental health. This course serves as an introduction to the Certified Community Paramedic curriculum.
(1 lec/O lab)
1 sem hrs

## EMT 120 Emergency Medical Technician - Basic

This course emphasizes emergency medical care skills and teaches these skills in a jobrelated context based on the Department of Transportation (DOT) National Standard Curriculum. Course content includes the care of individuals with various traumatic/emergent medical conditions, as well as training in the use of medical equipment and materials. This course prepares the student for either the State licensure examination for the State Emergency Medical Technician Basic or the National Registry of Emergency Medical Technician Examination through the Illinois Department of Public Health. Repeatable to a maximum of 36 semester hours; 9 semester hours may apply to a degree or certificate.
Note: Students must submit proof of current CPR or Basic Life Support for Health Care Providers to the instructor on the first day of class and are required to purchase a stethoscope. The State of Illinois requires completion of high school equivalency or a high school diploma prior to testing for certification, and that students be at least 18 years of age to test. Proof of a tuberculosis test and current immunizations must be submitted to the instructor prior to the first day of the emergency room experience. Prereq: Reading assessment; CPR training (American Heart Association Basic Life Support for Health Care Providers); 17.5 years of age or older; ability to lift a pre-determined weight.
(8 lec/3 lab)
9 sem hrs

## EMT 124 Survey of Paramedic Skills

This course is intended to train paramedics in history taking, physical examintation, airway management, medical patient assessment, medical patient management, cardiac patient assessment and management, trauma patient assessment and management, venous access, medication administration, obstetric patient assessment and management, delivery and care for a newborn, pediatric assessment and leadership skills. It includes classroom theory and laboratory experience.
Prereq: Program admission; current license as an EMT-B.
Coreq: EMT125; EMT126.
(6 lec/ lab) 6 sem hrs

## EMT 125 Paramedic I

This course is intended to train paramedics in pulmonology, medical/legal issues, ethics, Emergency Medical Systems, personal wellness, injury prevention, communications, anatomy and physiology, pathophysiology, medication administration and life span development. This course includes classroom theory and laboratory experience.
Prereq: Program admission; current license as an EMT-B.
Coreq: EMT124
(4 lec/5 lab)
6.5 sem hrs

## EMT 126 Paramedic II

This course is intended to train paramedics in International Life Support, trauma, environmental emergencies, psychiatric and behavioral disorders, gynecology, obstetrics, neonatology, pediatrics, Pediatric Life Support, geriatric emergencies, Advanced Cardiac Life Support, airway management, patient assessment, arrhythmia recognition and cardiology. It includes classroom theory and laboratory experience.
Prereq: Program admission; current license as an EMT-B; EMT125.
Coreq: EMT124
(4 lec/5 lab)
6.5 sem hrs

## EMT 127 Paramedic III

This course is intended to train paramedics in medical/legal issues, ethics, emergency/medical systems, personal wellness, injury prevention, communications, life span development, acute interventions for chronic-care patients, neurology, endocrinology, allergies/anaphylaxis, gastroenterology, urology/nephrology, toxicology, and substance abuse. It includes classroom theory and laboratory experience. Prereq: Program admission; current license as an EMT-B; C or better in EMT124, EMT125, and EMT126.
Coreq: EMT130 and EMT131.
(3 lec/3 lab) 4.5 sem hrs

## EMT 128 Paramedic IV

This course is intended to train paramedics in hematology, infectious disease, abuse and assault, challenged patients, extrication awareness, ambulance operations, medical incident command, crime scene awareness, rural EMS, and assessment-based management. It includes classroom theory and laboratory experience.
Prereq: Program admission; current license as an EMT-B; C or better in EMT124, EMT125, EMT126, EMT127, EMT130, and EMT131. Coreq: EMT230; EMT231.
(3 lec/3 lab) 4.5 sem hrs

## EMT 130 In-Hospital Clinical Experience - Paramedic I

In-hospital clinical experience includes: instruction and supervised practice of emergency medical skills primarily in the Emergency Departments of Northwestern Medicine-Delnor Hospital, Presence Mercy Medical Center, and Rush-Copley Medical Center. Other experience is gained in critical care units, operating rooms, labor and delivery or cardiac catheterization labs. The in-hospital clinical runs concurrently with the field clinical and the paramedic internship.
Prereq: Program admission; current license as an EMT-B; EMT124; EMT125; EMT126. Coreq: EMT127; EMT131.
(0 lec/6 lab)
3 sem hrs

## EMT 131 Field Clinical Experience for Paramedic I

Field clinical experience includes: a period of supervised pre-hospital experience on an Advanced Life Support vehicle. Students are under the direct supervision of a department approved mentor. This represents the phase of instruction where the student learns how to apply cognitive knowledge and the skills developed in the skills laboratory and hospital clinical to the field environment. The field clinical runs concurrently with the in-hospital clinical and the paramedic internship.
Prereq: Program admission; current license as an EMT-B; EMT124; EMT125; EMT126.
Coreq: EMT127; EMT130.
(O lec/7.5 lab)
2 sem hrs

## EMT 230 In-Hospital Clinical Experience - Paramedic II

In-hospital clinical experience includes: instruction and supervised practice of emergency medical skills primarily in the Emergency Departments of Northwestern Medicine-Delnor Hospital, Presence Mercy Medical Center, and Rush-Copley Medical Center. Other experience is gained in critical care units, operating rooms, labor and delivery or cardiac catheterization labs. The in-hospital clinical runs concurrently with the field clinical and the paramedic internship.
Prereq: Program admission; current license as an EMT-B; C or better in EMT124, EMT125, EMT126, EMT127, EMT130, and EMT131. Coreq: EMT128; EMT231.
(0 lec/3 lab)
1 sem hrs

## EMT 231 Field Clinical Experience for Paramedic II

Field clinical experience includes: a period of supervised pre-hospital experience on an Advanced Life Support vehicle. Students are under the direct supervision of a department approved mentor. This represents the phase of instruction where the student learns how to apply cognitive knowledge and the skills developed in the skills laboratory and hospital clinical to the field environment. The field clinical runs concurrently with the in-hospital clinical and the paramedic internship. Prereq: Program admission; current license as an EMT-B; C or better in EMT124, EMT125, EMT126, EMT127, EMT130, and EMT131. Coreq: EMT128; EMT230.
(0 lec/5 lab)
1 sem hrs

## EMT 299 Paramedic Internship

Combining academic credit with professional experience, the paramedic internship is the evaluative phase of the paramedic program. Students serve as entry-level paramedics under the supervision of an approved Southern Fox Valley-Emergency Medical Systems preceptor. Prereq: Program admission; current license as an EMT-B; C or better in EMT124, EMT125, EMT126, EMT127, EMT128, EMT130, EMT131, EMT230, and EMT231. (0 lec/9.5 lab) 3 sem hrs

## Engineering (EGR)

## EGR 101 Engineering Graphics

This introduction to engineering and design includes drafting, dimensioning, tolerancing, fasteners and descriptive geometry. Engineering graphics topics include multi-view orthographic representations, principal auxiliary views, section views and production drawings. At least 50 percent of the course will require the student to use CAD. Additional lab time outside of class may be required in order to complete assignments/projects.
IAI: EGR 941.
(2 lec/2 lab)
3 sem hrs

## EGR 220 Analytical Mechanics-Statics

This is the first part of an introduction to mechanics from an engineering perspective. It is a study of systems of forces and moments as they apply to the equilibrium of particles and rigid bodies and to the analysis of structures such as trusses, beams, frames and machines. Prereq: MTH131; PHY221 or concurrent enrollment.
IAI: EGR 942.
(3 lec/0 lab)
3 sem hrs

## EGR 230 Analytical MechanicsDynamics

This is the second part of an introduction to mechanics from an engineering perspective. It is a study of the motion of particles and rigid bodies, in general and as applied to simple mechanisms.
Recommended Prereq: EGR220.
IAI: EGR 943.
(3 lec/0 lab)
3 sem hrs

## EGR 296 Topics/Issues for Engineering

This course offers in-depth exploration of a special topic, issue or trend in the engineering field. Repeatable to a maximum of 24 semester hours for different special topics; 6 semester hours may apply to a degree or certificate.
(1 to 6 lec/0 lab)
1 to 6 sem hrs

## English (ENG)

See also Reading (RDG).

NOTE: Placement in English courses is determined by scores on required assessment tests or ACT or SAT scores.

## ENG 050 Basic Composition I

Basic Composition I is the first in a two-course developmental composition sequence that precedes transfer-level composition courses.
This course encourages students to find/define their voice while developing an understanding and facility with basic writing skills and negotiating an individualized writing process. Students express themselves in a variety of both formal and informal writing situations.
(3 lec/0 lab)
3 sem hrs

## ENG 070 Basic Composition II

Basic Composition II is the second in a twocourse developmental composition sequence that precedes transfer-level composition courses. This course encourages students to develop/refine their voice and writing skills while responding to more complex formal writing situations. Students learn how to compose both formal essays and informal writing tasks. Students also engage in the research process as they participate in a larger academic community of thinkers, readers, and writers.
Prereq: C or better in ENG050 or placement by assessment.
(3 lec/O lab) 3 sem hrs

## ENG 101 First-Year Composition I

This course focuses on the writing and revising of expository essays and writing projects and is the first in a two-course sequence. It concentrates on the writing process, identifying and responding to different audiences and rhetorical situations, and understanding the conventions of format and structure in various discourse communities, including academic writing. Practice in critical thinking and essay development is emphasized.
Note: IAI General Education requires a C or better in this course.
Prereq: C or better in ENG070 or placement by assessment or ETP075.
IAI: C1 900.

## (3 lec/0 lab)

3 sem hrs

## ENG 102 First-Year Composition II

This course focuses on the writing, researching and revising of expository essays and writing projects. The second of a two-course sequence, it concentrates on the writing process, identifying and responding to different audiences and rhetorical contexts, and understanding the conventions of format and structure in various discourse communities, including academic writing. Practice in critical thinking and essay development is emphasized. Students write analytical and argumentative essays, including an academic research paper.
Note: IAI General Education requires a C or better in this course.
Prereq: C or better in ENG101.
IAI: C1 901R.
(3 lec/0 lab)
3 sem hrs

## ENG 152 Business Communication

This basic communication course for the occupational or technical student is intended to improve the student's written communication skills, with major emphasis on writing business correspondence more effectively for business and industry.
(3 lec/0 lab)
3 sem hrs

## ENG 153 Technical Writing

This course emphasizes technical writing basics, including defining an audience, understanding style and format, using graphic elements and visual aids, evaluating purpose and format and document handling with business ethics in mind. Students develop business-related documents such as proposals, reports, user manuals, and technical brochures. Sentence-level mechanics, conciseness, paragraph structure, organization, and language precision are addressed. Collaboration and revision are emphasized.
(3 lec/O lab)
3 sem hrs

## ENG 204 Creative Writing: Fiction

This course provides guided practice in writing fiction, with emphasis on the structure, elements and skills common to creative expression in fiction. It is designed to help students discover and develop their own best medium for expression.
Prereq: ENG 101.
(3 lec/0 lab)

## 3 sem hrs

## ENG 205 Creative Writing: Poetry

This course offers practice and guidance in the writing of poetry with emphases on fundamental elements of image, trope, metaphor, voice, line, diction, syntax, and rhythm. Students will read and write lyric, narrative, and dramatic poems and work toward discovering and developing their own voices in a collaborative, workshop setting. Students will also read poetry by established poets. Prereq: ENG 101.
(3 lec/0 lab)
3 sem hrs

## ENG 206 Creative Writing: Non-Fiction

This course provides guided practice in writing creative non-fiction, with emphasis on the structure, elements, and skills common to creative expression in non-fiction. It is designed to help students discover and develop their own stories and research into fully developed narratives about the world around them. Prereq: ENG101.
(3 lec/0 lab)
3 sem hrs

## ENG 211 American Literature to 1865

This course is a survey of representative works illustrating the development of American literature from its beginnings to the Civil War, with an emphasis on major literary movements understood in relation to their intellectual, social, and political contexts.
Prereq: ENG101.
IAI: H3 914.
(3 lec/0 lab)
3 sem hrs

## ENG 212 American Literature From 1865

This course explores writings in the United States from the end of the Civil War to the present with emphases on major literary movements, such as Realism, Naturalism, Modernism, Postmodernism and Multiculturalism, understood in relation to their intellectual, social and political contexts. Prereq: ENG101.

IAI: H3 915.
(3 lec/0 lab)
3 sem hrs

## ENG 215 Masterpieces of American Literature

This course emphasizes the development and treatment of major themes and ideas in the works of significant American authors. Such representative writers as Bradford Edwards, Franklin, Hawthorne, Poe, Melville, Emerson, Thoreau, Twain, James, Dickinson, Faulkner, Hemingway, Steinbeck and others are read. Understanding and enjoyment of the assigned readings are emphasized along with historical and sociological contexts.
Prereq: ENG101.

## IAI: H3 915.

(3 lec/0 lab) 3 sem hrs

## ENG 220 Multicultural Literatures of the United States

This course is an introduction to multicultural literary works of the United States, with emphases on novels, autobiographies, poetry, short stories, drama, memoir, essays, journals and other literary genres. This course requires students to read and understand a variety of texts in order to explore issues of race, ethnicity, class, caste, gender, sex, sexuality, nation, region, disability, age and ecosystem, along with history, formal dynamics and the personal as political.
Prereq: ENG101.
IAI: H3 910D.
(3 lec/0 lab)
3 sem hrs

## ENG 221 British Literature to 1800

This course is a chronological study of British masterpieces from Beowulf through the preRomantics. The history of ideas may be studied to show the relationship between an idea and its literary embodiments. Critical analysis skills are required.
Prereq: ENG101.
IAI: H3 912.
(3 lec/0 lab)
3 sem hrs

## ENG 222 British Literature From 1800

This course is a chronological study of the evolving world of British literature. Major works of poetry, drama and fiction from the Romantic, Victorian, Modern and contemporary periods are studied. Students will forge connections between authors, works, eras and genres through critical analysis and synthesis. This course is a continuation of ENG221 but may be taken independently.
Prereq: ENG101.
IAI: H3 913.
(3 lec/0 lab)
3 sem hrs

## ENG 225 Masterpieces of British Literature

This course emphasizes the major themes, ideas and eras of British literature. Selections include Shakespeare, Milton, Swift, the Romantic, Victorian and Modern eras, and contemporary British literature. Understanding and enjoyment of the assigned readings is emphasized along with historical and sociological contexts. Prereq: ENG101.
IAI: H3 913.
(3 lec/0 lab)
3 sem hrs

## ENG 226 Introduction to Shakespeare

This course is an introduction of the works of Shakespeare for understanding and enjoyment through a study and analysis of representative plays.
Prereq: ENG101.
IAI: H3 905.
(3 lec/0 lab)
3 sem hrs

## ENG 228 Children's Literature

Children's Literature introduces the students to the major genres of children's books, both in print and digital formats. The class focuses on authors, illustrators and trends in children's literature for emerging readers through middle school students. The impact of popular culture, caregiver and educator influence and societal trends on children's literature and literacy development will be investigated. Selection of age and reading level appropriate materials, introducing children to books, and storytelling are also emphasized.
Prereq: ENG101.
IAI: H3 918.
(3 lec/0 lab)
3 sem hrs

## ENG 229 Introduction to Literature

This course is an introduction to fiction (short story and novellas or novels), poetry and drama from classic to contemporary selections. This course includes study of literary techniques and thematic interpretations of the works read. Prereq: ENG101.
IAI: H3 900.
(3 lec/0 lab)
3 sem hrs

## ENG 230 Introduction to Poetry

This course is a critical study of world poetry with respect to structure and content through close reading of poems in a variety of styles from the Renaissance to recent times. Prereq: ENG101.
IAI: H3 903.
(3 lec/0 lab)
3 sem hrs

## ENG 235 Short Stories to Novels: Examining Fiction

This course is a critical study of three forms of fiction (short story, novella, and novel) from classic and contemporary selections. It includes critical analysis, study of techniques, historical background and thematic interpretations of the works read. English majors should be aware that universities may accept only a certain number of English courses.
Prereq: ENG101.
IAI: H3 901.
(3 lec/0 lab)
3 sem hrs

## ENG 240 Introduction to Drama as Literature

This course explores the literary aspects, concepts and principles of drama. It includes the critical study of various types of plays from a variety of periods. Consideration is given to the technical aspects of dramatic production, as well as backgrounds of the physical theatre, historical development of the drama form and selected authors.
Prereq: ENG101.
IAI: H3 902.
(3 lec/0 lab)
3 sem hrs

## ENG 245 World Literature

This course is a survey of representative readings from ancient times to the present. The course emphasizes the significance of the selections as human documents as well as their importance as literature. Although this course focuses primarily upon Western literature, representative texts from other cultures may be integrated into the syllabus. A cross selection of literary genre ranging from Greek and Roman epics to modern plays, love sonnets and modern short stories constitutes the course reading list. Prereq: ENG101.
IAI: H3 906.
(3 lec/0 lab)
3 sem hrs

## ENG 255 Women's Literature

This course introduces students to novels, short stories, poetry, essays, memoir, drama, journals and other literary genre written by women in English across several centuries and from a variety of racial, ethnic, sexual, class, disability, age, regional and national backgrounds. Students explore how systems of race, ethnicity, class, caste, gender, sex, sexuality, disability, age, region, nation and ecosystem affect the conditions under which women write as well as what they write. Students also explore differences and continuities in women writers' perspectives and their uses of form, content and subject.
Prereq: ENG101.
IAI: H3 911D.
(3 lec/0 lab)
3 sem hrs

## ENG 265 Latina and Latino Literature

Latina and Latino Literature introduces students to major Latina and Latino writings in English in the United States. The course focuses on the primary works, authors and trends in Latina/o literature. Students read texts in a variety of genres--fiction, drama, essays, poetry, memoir, etc. Authors include, but are not limited to, those with roots in Cuba, the Dominican Republic, Mexico, Puerto Rico and throughout South, Central and North Americas.
Prereq: ENG101.

## (3 lec/0 lab)

3 sem hrs

## ENG 296 Special Topics in Literature

This course offers in-depth exploration of a special topic, issue or trend in literature. Repeatable to a maximum of 16 semester hours for different special topics; 6 semester hours may apply to a degree or certificate.
Prereq: ENG101.
(2 to 4 lec/0 lab)
2 to 4 sem hrs

## Entrepreneurship (ETR)

## ETR 140 Introduction to Entrepreneurship

This course exposes students to the entrepreneurial experience and perspective, the role of entrepreneurship and its impact on organizations of all types and society-atlarge. Included are case studies of both failed and successful ventures and a look at current economic needs and trends.
(3 lec/0 lab)
3 sem hrs

## Film Studies (FLM)

## FLM 250 Film as Art: A Survey of Film

An introduction to film as an art form, this course examines aesthetic and production elements of the motion picture medium, including its narrative genres, directorial styles, cinematography, film acting, and film editing.

IAI: F2 908.
(3 lec/O lab) 3 sem hrs

## FLM 260 History of Film

This course surveys the historical development of film, emphasizing the study of international films, movements, genres, and innovations in film production that have had significant influence on film as an art form.

IAI: F2 909.
(3 lec/0 lab)
3 sem hrs

## FLM 270 Film and Literature

This course is a study of formal, thematic and/ or historical relationships between literary and cinematic forms, including an examination of adaptations and influences that demonstrate the strengths of each artistic medium.
IAI: HF 908.
(3 lec/0 lab)
3 sem hrs

## Finance

## and Banking (FIN)

## FIN 200 Principles of Finance

In this introduction to the role of financial management in today's business world, the following course topics are emphasized: financial markets, debt and equity financing, short and long term financing, capital budgeting, risk and rates of return, and financial statement analysis.
Recommended Prereq: ACC120.

## (3 lec/0 lab) <br> 3 sem hrs

## FIN 205 Personal Finance and Investing

This course offers students sound direction in making personal financial decisions. It is a comprehensive look at the important financial decisions that individuals make throughout their lives and provides a foundation for making informed personal financial decisions. Coverage includes investment fundamentals and investing strategies, guidance on consumer purchases, insurance basics, time value of money concepts, and retirement and estate planning.
Recommended Prereq: BUS100.
(3 lec/0 lab)
3 sem hrs

## Fire Science (FSC)

## FSC 105 Basic Operations Firefighter Module A

This course provides the lecture and practical training toward the Basic Operations Firefighter Certification by the Office of the State Fire Marshal. This course covers fire department organization, fire behavior, building construction, safety, communications, selfcontained breathing apparatus, extinguishers, and ropes and knots.
(4 lec/0 lab) 4 sem hrs

## FSC 115 Basic Operations Firefighter Module B

This course provides the lecture and practical training toward Basic Operations Firefighter Certification by the Office of the State Fire Marshal. Topics discussed include nozzles and streams, water supply, forcible entry, ladders, hose and appliances, ventilation. Enforced Prereq: FSC105 or concurrent enrollment.
(4 lec/0 lab)
4 sem hrs

## FSC 118 Basic Operations Firefighter Module C

This course provides training toward Basic Operations Firefighter Certification by the Office of the State Fire Marshal. Topics discussed include Fireground Search and Rescue, Fire Control, Loss Control, Alarm Detection and Suppression Systems, Fire Prevention and Education, Wildland Firefighting, Fire Fighter Survival, Preserving Evidence. Enforced
Prereq: FSC105; FSC115 or concurrent enrollment.
(4 lec/lab) 4 sem hrs

## FSC 120 Hazardous Materials Operations

This course is designed to provide students with the skills and knowledge necessary to be examined and certified by the Illinois Office of the State Fire Marshal as a Hazardous Materials First Responder.
(3 lec/0 lab)
3 sem hrs

## FSC 125 Advanced Technician Firefighter

This course provides partial training toward Advanced Technician Firefighter Certification and instructs Basic Operations Firefighter students in advanced firefighting techniques. Content for this course includes fire department organization, fire behavior, safety, communications, building construction, ladders, fire hose, water supply, tools and equipment, forcible entry, ventilation, fire control, protecting evidence for cause and origin, fire prevention and education, fire detection and alarm suppression systems, firefighter survival and technical rescue. Successful completion of this course, practical completion and passage of the state written exam along with other required Office of the State Fire Marshal courses leads to Office of the State Fire Marshal Certification as an Advanced Technician Firefighter.
Recommended Prereq: FSC105 and FSC115; or Basic Operations Firefighter Certification.
(4 lec/0 lab)
4 sem hrs

## FSC 140 Fire Apparatus Engineer

This course is designed to provide students with the necessary background, knowledge and skills to perform the duties of a fire apparatus engineer, which include pump operations, pump functions, pumper components, pumper requirements for maintaining and testing apparatus, fire stream development, and water supply in relation to various fire ground situations. This course provides training toward Fire Apparatus Engineer Certification by the Illinois Office of the State Fire Marshal. Recommended Prereq: Firefighter II Certification.
(4 lec/0 lab)
4 sem hrs

## FSC 150 Vehicle and Machinery Operations

This course provides basic skills toward the performance of rescue specialist operations. It provides an introduction to the knowledge and skills required in the various specialties of extrication. This course provides training toward Rescue Specialist-Roadway Extrication Certification by the Illinois Office of the State Fire Marshal. Repeatable to a maximum of 6 semester hours; 3 semester hours may apply to the degree.
Recommended Prereq: Firefighter II Certification.
(3 lec/0 lab)

## 3 sem hrs

## FSC 160 Tactics and Strategy I

This introduction to the basic principles and methods associated with fireground tactics and strategy as required of the company officer emphasizes size-up, fire ground operations, pre-fire planning, and basic engine and truck company operations.
Recommended Prereq: FSC105.
(3 lec/0 lab)
3 sem hrs

## FSC 170 Fire Science Instructor I

This course is designed to meet the needs of those individuals who wish to expand their knowledge in the area of instructing other individuals. It is structured to provide basic information about human relations in the teaching-learning environment, methods of teaching and the proper method of writing lesson plans. This course provides training toward Fire Instructor I Certification by the Illinois Office of the State Fire Marshal and is designed using NFPA Standard 1041, Chapter 2, 1996 edition. A Firefighter II Certification is required to qualify for an Instructor I
Certification.
Recommended Prereq: Firefighter II
Certification.
(3 lec/0 lab) 3 sem hrs

## FSC 215 Technical Rescue and Vehicle Operations

This course provides training toward the Office of the State Fire Marshal Technical Rescue Awareness Certification and partial training toward the Fire Service Vehicle Operator Certification. The technical rescue awareness segment of the course covers identification of rescue situations, their specific hazards, and the appropriate responses. Successful completion qualifies the student for the Office of the State Fire Marshal State Certification exam for Technical Rescue Awareness. The fire service vehicle operator portion of the course discusses the safe operation of a fire service vehicle during emergency and non-emergency situations. The classroom instruction must be combined with a fire department practical driving exam for the completion of the Office of the State Fire Marshal examination for the Fire Service Vehicle Operator Certification.
(1 lec/0 lab)
1 sem hrs

## FSC 220 Fire Inspection and Prevention

This fire prevention and inspection course is designed to provide basic training in the principle aspects of public education, code enforcement and engineering. Subject material covered includes life safety, hazards, cause, codes, public education and fire prevention bureau management.
Recommended Prereq: Firefighter III Certification.
(3 lec/0 lab)
3 sem hrs

## FSC 231 Fire Science Administration I

This course covers the role and function of a Fire Officer I, management principles, organizational concepts, staffing, basic motivational skills and performance appraisal. This course provides training toward Fire Officer I. Certification is required to qualify for Fire Officer I.
Recommended Prereq: Firefighter III
Certification.
(3 lec/0 lab)
3 sem hrs

## FSC 232 Fire Science Administration II

This course covers workplace communication, work groups, group job performance, group leadership, and the role of health and safety in a fire science organization. This course provides training toward Fire Officer I Certification by the Illinois Office of the State Fire Marshal. Recommended Prereq: FSC231.
(3 lec/0 lab)
3 sem hrs

## FSC 233 Fire Science <br> Administration III

This course covers the role and function of a Fire Officer II. Topics include organization, management, social services, capital resource management, public finance and budgeting, public relations and information management as they pertain to a fire science organization. This course provides training toward Fire Officer II Certification by the Illinois Office of the State Fire Marshal.
Recommended Prereq: Fire Officer I
Certification.
(3 lec/0 lab)
3 sem hrs

## FSC 234 Fire Science <br> Administration IV

This course covers personnel management, health and safety, and labor relations as they pertain to a fire science organization. This course provides training toward Fire Officer II Certification by the Illinois Office of the State Fire Marshal.
Recommended Prereq: FSC233.
(3 lec/0 lab) 3 sem hrs

## FSC 260 Tactics and Strategy II

This course provides additional tactics and strategies essential for effective ground operations. It emphasizes strategy, incident management, multicompany operations, planning and stress. This course provides training toward Fire Officer II Certification by the Illinois Office of the State Fire Marshal. Recommended Prereq: FSC160 or Fire Officer I certification.
(3 lec/0 lab)
3 sem hrs

## FSC 270 Fire Science Instructor II

This course is designed to meet the needs of those individuals who wish to expand their knowledge in the area of instructing others. It is structured to provide basic information about human relations in the teaching-learning environment, methods of teaching and the proper method of writing lesson plans. This course provides training toward Fire Instructor II Certification by the Illinois Office of the State Fire Marshall and is designed using NFPA Standard 1041, Chapter 3, 1996 edition.
Note: Students should be aware that a
Saturday class meeting may be required. Recommended Prereq: FSC170 or Fire Science Instructor I Certification.
(3 lec/0 lab)
3 sem hrs

Course Descriptions
Foreign Languages

## Foreign Languages

See individual languages: Chinese, French, German, Japanese, Spanish.

## French (FRE)

## FRE 101 Elementary French I

This is an introductory course in the basic structures and vocabulary of French. As language is a reflection of culture, learning about life in France and other French-speaking countries is also included. Emphasis on listening, speaking, reading and writing in French is stressed throughout the course.
(3 lec/0 lab)
3 sem hrs

## FRE 102 Elementary French II

This course is a continuation of FRE101 with emphasis on the basic structures and vocabulary of French. The main objective of the course is to expand and broaden skills in communicating effectively in French. The four basic skills of listening, speaking, reading, and writing are further developed.
Recommended Prereq: FRE101 or one year of high school French or its equivalent.
(3 lec/0 lab)
3 sem hrs

## FRE 201 Intermediate French I

This course is a continuation of FRE102 with further consideration of the basic structures and vocabulary of French. Increased development of the ability to listen, speak, read, and write in French and enhanced understanding of life in France and other French-speaking countries are emphasized.
Recommended Prereq: FRE102 or two years of high school French or its equivalent.
(3 lec/0 lab)
3 sem hrs

## FRE 202 Intermediate French II

This course is a continuation of FRE201 and is the culminating course in the French sequence. Continued development of the ability to listen, speak, read and write in French are emphasized. The use of more complex and nuanced structures and continued study of cultural issues in France and other French-speaking countries are included.
Recommended Prereq: FRE201 or three years of high school French or its equivalent.

IAI: H1 900.
(3 lec/0 lab)
3 sem hrs

## FRE 296 Special Topics in French

This course offers in-depth exploration of a special topic, issue or trend as it relates to the French language.
(1 to 3 lec/0 lab)
1 to 3 sem hrs

## Geography (GEO)

## GEO 120 World Regional Geography

Students are introduced to contemporary issues related to various environmental, political, geographic, and socio-economic trends and factors. Regional concepts from areas such as the Americas, Africa, Asia, and Europe, and Latin America will be examined.

IAI: S4 900N.
(3 lec/0 lab)
3 sem hrs

## GEO 121 Physical Geography

This course is designed to provide an introduction to the general physical environment emphasizing subjects and terminology from the atmosphere, biosphere, lithosphere, and hydrosphere. Topics such as meteorology, earthquakes, volcanoes, river systems and soils will be examined. A laboratory component further explores these topics using the scientific method of observation, hypothesis, formation, and experimentation.

IAI: P1 909L.
(3 lec/2 lab)
4 sem hrs

## GEO 130 GIS and Mapping Principles

GEO130 introduces students to the application and practical importance of Geographic Information Systems (GIS). The course covers the design and functions of GIS through lecture and laboratory applications. Students will learn to create basic maps and to perform basic editing, spatial analyses and communicate those results through maps.
(2 lec/2 lab)
3 sem hrs

## GEO 131 Geographic Information Systems I

This course continues introducing GIS concepts and procedures. A review of introductory GIS procedures such as design and data concepts will be discussed. The geodatabase design and concepts will be introduced as well as intermediate analysis techniques.
Recommended Prereq: GEO130.
(2 lec/2 lab)
3 sem hrs

## GEO 132 Geographic <br> Information Systems II

This course further refines the use of GIS through the use of different modeling tools used in GIS. Topics will include GIS examined through land use and parcel construction. Other topics will include GIS terminology, Network Analyst, additional GIS concepts as well as geo-referencing. Various class projects will be given throughout the semester. Recommended Prereq: GEO131.
(2 lec/2 lab)

## GEO 140 Geographic Information Systems III

This course is designed to further advance a student's knowledge of GIS topics and techniques that were introduced in GEO132. Emphasis is placed on toolsets and other editing procedures used in ArcGIS. Students will also examine 3-D modeling techniques and apply this knowledge to a 3D mapping project. Recommended Prereq: GEO132.
(2 lec/2 lab)
3 sem hrs

## GEO 200 Applications for Geographic Information Systems

This course continues introducing GIS concepts and procedures. Applications, cartographic design, and project analysis will be the main focus of this course. A project of the student's choice will also be emphasized. An analysis of patterns and trends as well as discussion articles will be explored.
Recommended Prereq: GEO140.
(2 lec/2 lab)
3 sem hrs

## GEO 210 GIS and Logistics Management

This course is designed to prepare students to apply geographic information systems for the purpose of logistics transportation mapping. Warehouse distribution, fleet routing, emergency management, territory planning, and budget analysis are some of the solutions that are examined using a geographic information framework. A detailed review of ArcGIS will also be addressed.
Recommended Prereq: GEO131.
(2 lec/2 lab)
3 sem hrs

## GEO 220 Geography of the Developing World

This course introduces students to the application and practical importance of environment, geography, and socio-economic issues that have impacted the developed world. An overview of various areas such as Asia, Africa, and Europe will be discussed as well as an examination of other factors such as the human impact to regional ecologically.
IAI: S4 902N.
(3 lec/0 lab)
3 sem hrs

## GEO 235 Human Geography

This course is organized on a topical basis and is designed to provide an introduction to human geography by highlighting various geographic concepts. It is intended to acquaint the student with a general understanding of culture including language and religion, spatial interaction between people, regionalism, the physical environment and population trends.
IAI: S4 900N.
(3 lec/0 lab)
3 sem hrs

GEO 296 Special Topics in Geography
This course offers in-depth analysis of a special topic, issue, or trend in geography. Topics may include GIS or other areas related to geography. Repeatable to a maximum of 12 semester hours for different special topics; 6 semester hours may apply to a degree or certificate.
(0 to 3 lec/0 to 6 lab) 1 to 3 sem hrs

## Geology (GLG)

## GLG 100 Introduction to Physical Geology

This course examines the basic principles of geology from a physical and historical perspective. It includes such topics as the formation of rocks and minerals; internal and external processes modifying the earth's surface and other natural phenomena; and the evolutionary history of the earth, including its life forms and continents.
Note: Students enrolling in GLG100 are not required to enroll in GLG101 (lab). However, those students needing a 4 semester-hour lab science for transfer purposes may wish to concurrently enroll in GLG100 and GLG101.
IAI: P1 907.
(3 lec/0 lab)
3 sem hrs

## GLG 101 Introduction to Physical Geology Laboratory

This course includes weekly face-to-face laboratory work involving mineral and rock identification, topographic and geologic map exercises, and some fieldwork.
Prereq: GLG100 or concurrent enrollment.
IAI: P1 907L.
(0 lec/2 lab)
1 sem hrs

## GLG 102 Historical Geology

This course is an introduction to the origin and structure of the earth through a study of the evolution of its life and continents over the last 4.6 billion years. Emphasis is placed on the formation and interpretation of sedimentary rocks for the purpose of understanding how they, and the fossils contained within them, record changes in the Earth's environment and processes over time. Plate tectonics and extinctions recorded in rocks are studied to understand how they reflect environmental changes in the Earth's ocean, atmosphere, and surface.
Note: Field trips may be part of the course. Recommended Prereq: GLG100.
IAI: P1 907L.
(3 lec/2 lab) 4 sem hrs

## GLG 103 Environmental Geology

This course examines human interaction with geologic processes and hazards, including earthquakes, volcanoes, mass wasting and flooding. Environmental concerns to be discussed include the occurrence and availability of geologic resources (energy, water and minerals), land use planning, groundwater pollution and remediation, environmental health and law. The course is intended for nonscience or potential environmental sciences majors.

## IAI: P1 908.

(3 lec/0 lab)
3 sem hrs

## GLG 120 Geology of the National Parks

Geology of the National Parks develops geological background, concepts and principles through the study of selected national parks. Students articulate the reasons why sites are designated as national parks, monuments, and seashores, and the role that geology has in determining that status. Basic geologic concepts discussed are minerals, rocks, geologic time, sedimentary environments and rivers, plate tectonics, volcanoes, weathering, mass wasting, earthquakes, and glaciers and glaciation. Human interactions and archeology are presented where appropriate.
IAI: P1 907.
(3 lec/0 lab) 3 sem hrs

## German (GER)

## GER 101 Elementary German I

This is an introductory course in the basic structures and vocabulary of German. The course is taught by using culturally authentic themes from everyday life with an emphasis on communication. In addition to the four basic language skills of listening, speaking, reading, and writing, cultural aspects of the Germanspeaking countries are also presented.
(3 lec/0 lab)
3 sem hrs

## GER 102 Elementary German II

This course is a continuation of GER101 and expands on elementary grammar essentials. Reading and interpreting of more advanced German conversation, prose, diction and composition are included.
Recommended Prereq: GER101 or one year of high school German.
(3 lec/0 lab)
3 sem hrs

## GER 201 Intermediate German I

This course provides a thorough review of grammar and an in-depth consideration of the most difficult grammatical concepts. Emphasis on reading, writing and speaking the German language is stressed throughout the course. Recommended Prereq: GER102 or two years of high school German.
(3 lec/0 lab)
3 sem hrs

## GER 202 Intermediate German II

This course is a continuation of GER201 and provides a further study and review of grammar and idiomatic colloquial German. Increased emphasis is placed on conversational and free composition and the reading of more difficult texts.
Recommended Prereq: GER201 or three years of high school German.

IAI: H1 900.
(3 lec/0 lab)
3 sem hrs

## GER 296 Special Topics in German

This course offers in-depth exploration of a special topic, issue or trend as it relates to the German language.
(1 to 3 lec/0 lab)
1 to 3 sem hrs

## Graphic Design (GRD)

## GRD 135 Desktop Publishing

This course covers desktop publishing technology, progressing from the beginning to the advanced level. Students design projects exploring the software and hardware aspects of electronic page layout and design. Students also learn to integrate various type, image and graphic elements. Other topics include file transfer and document printing.
Note: Software includes Adobe InDesign and other applications.
(1 lec/5 lab)
3 sem hrs

## GRD 160 Computer Illustration

This course covers vector graphics computer software, progressing from the beginning to the advanced level. Students explore the methods and techniques of computer-generated images as solutions to illustration projects. Objectoriented and vector-based graphics as well as print programs are utilized. Software includes Adobe Illustrator.
(1 lec/5 lab)
3 sem hrs

## GRD 165 Typography

This course provides an introduction to typographic history, study of letterforms, terms, classifications and typeface selection. Students explore type mechanics and aesthetics by using type in a variety of design applications. Students examine structure, layout, and information hierarchy, as well as the relationship of type to image and cultural context.
Note: Software includes Adobe InDesign, Adobe Illustrator, and font editing and managing applications.
Prereq: GRD135 and GRD160; or concurrent enrollment.
(3 lec/0 lab)
3 sem hrs

## GRD 170 Digital Image

This course covers digital image computer software, progressing from the beginning to the advanced level. Students learn techniques and features, with emphasis on composition and color, through a number of challenging assignments. Image scanning, manipulation, editing, repairing and color correction are also covered. Software includes Adobe Photoshop. (1 lec/5 lab)

3 sem hrs

## GRD 173 Graphic Design I

This course presents an introduction to computers and their use in the field of advertising design. Emphasis is placed on creativity, design issues and the computer as a design tool.
Note: Software includes Adobe InDesign, Adobe Illustrator, Adobe Photoshop or other applications.
Prereq: GRD135 and GRD160; or concurrent enrollment.

## (1 lec/5 lab) <br> 3 sem hrs

## GRD 190 Prepress and Print Production

This course covers the prepress process of graphic design from computer layout to printed piece, using all technical aspects of digital print production. Through an overview of electronic print technology, students learn how to perform prepress functions by using graphic design software and the direct-to-plate printing process.
Note: Software includes Adobe InDesign, Adobe Illustrator and Adobe Photoshop. Prereq: GRD173 or concurrent enrollment.
(2 lec/2 lab)
3 sem hrs

## GRD 273 Graphic Design II

This course is a continuation of the analysis and interpretation of graphic design through illustration, symbolism and typography. Emphasis is placed on developing a portfolio from visualization to production techniques, through directed studio exercises using the Macintosh computer.
Note: Software includes Adobe InDesign, Adobe Illustrator, Adobe Photoshop and other applications.
Prereq: GRD173.
(1 lec/5 lab)
3 sem hrs

## GRD 280 2-D Animation and Multimedia

This course is a study of the computergenerated animation sequence from storyboard through two-dimensional rendering to final output. Students learn to combine images, illustrations, type and sound into animation.
Note: Software includes Adobe Flash and other sound and graphic applications. Recommended Prereq: GRD160; GRD170.
(1 lec/5 lab)
3 sem hrs

## GRD 2853-D Animation and Multimedia

This course explores the design and production of 3-D animation and multimedia applications and the relationship to two-dimensional graphic production, computer animation, and multimedia concepts and production procedures. The course also covers the different media of computer sound, text and imaging, and how these are combined into multimedia productions.
Note: Software includes Autodesk Maya and other applications.
Recommended Prereq: GRD280.

## (1 lec/5 lab) <br> 3 sem hrs

## GRD 290 Graphic Design Studio Art

This is an advanced studio course for art majors and graphic design majors. It allows continuation and concentration in a subject field. Emphasis is on individual research and personal exploration. Students can further their knowledge in graphic software, graphic project design, digital photography, website design or animation.
Prereq: Consent of instructor.
(1 lec/5 lab)

## GRD 292 Graphic Design Portfolio

This course is a culmination of the skills learned in the graphic design curriculum. Students reassess progress made and projects produced in their graphic design classes. Each student produces a professional portfolio from new and existing projects. A digital designer's resume, an electronic portfolio, interviewing techniques and job opportunities/internships are explored. Recommended Prereq: All major GRD, ART and WEB courses in the graphic design curriculum. (. 5 lec/1 lab)

1 sem hrs

## Health <br> Care Interpreting (HCI)

## HCI 120 Medical Interpreter

This intense course provides hands-on training via audio dialogues, placement scenarios, vignettes and online supplements for bilingual individuals interested in the field of medical interpreting. This course covers topics necessary to function as a community medical interpreter such as: Role of the Interpreter, Modes of Interpreting, Code of Ethics, Standards of Practice, Cultural Issues and Mental Health. The student is exposed to Medical Terminology and Anatomy in English/Spanish and develops proficiency in Consecutive Interpreting, Sight Translation and Simultaneous Interpreting.
Recommended Prereq: Native/Near Native Spanish/English Proficiency
(8 lec/0 lab)
8 sem hrs

## HCI 200 Simultaneous Health Care Interpreting: English/Spanish

This coaching course is designed to assist in improving linguistic fluency and developing proficiency for simultaneous interpreting in the health care profession. Emphasis is placed on interpreting professional/client dialogues and conference settings. Through specific techniques, audio tapes, videos, and placement scenarios, students learn and produce simultaneous interpreting.
Recommended Prereq: HCI110; HCI130; HCI150. Prereq: Program admission.
(3 lec/O lab)
3 sem hrs

## HCI 220 Approaches to Health Care in Hispanic Culture

This course introduces students to the history, vocabulary and practice of folk medicine in the Hispanic culture as well as cultural issues and vocabulary discrepancies among Spanish speaking cultures. Students develop an understanding of Curanderismo and its impact in the medical setting as they create herb catalogues and apply interpreting and culturalbrokering skills to solving case scenarios.
(3 lec/O lab)
3 sem hrs

HCI 275 Advanced Medical Translation: English/Spanish
This advanced medical translation course is designed to enhance the student's ability to produce accurate translations of more complex, specialized medical documentation such as clinical reports, medical journals, medical transcripts and medical legal documents as well as review issues related to the field of medical translation.
Prereq: Program admission; HCI175.
(3 lec/0 lab)
3 sem hrs

## HCI 290 Health Care Interpreting Seminar and Field Experience

This course is designed to provide training and familiarity in a health care interpreting setting and combines a supervised field experience with an on-campus seminar. Students meet for 3.5 hours four times during the semester in a group seminar and spend 80 hours experiencing on-the-job training at a health care interpreting agency. The history, fields, work sources, freelancing, organizations and challenges related to the field are discussed.
Prereq: Program admission; successful completion of all other HCI courses.
(1 lec/5 lab)
2 sem hrs

## Health Education (HED)

## HED 100 Personal Wellness

This course is designed to deal with common health problems. Emphasis is placed on prevention, maintenance and improvement through self-responsibility in areas of: achieving wellness, eating and exercising toward a healthy lifestyle, building healthy relationships, understanding and preventing disease, drug use and abuse, environmental influences and making healthy choices.
(3 lec/0 lab)
3 sem hrs

# Health Information Technology (HIT) 

## HIT 090 Health Information Technology Prep

The field of health information technology is introduced and explored through contextualized writing and reading assignments focused on improving academic skills to prepare students for college-level English course work. Content focus is on medical terminology, anatomy and physiology concepts, and legal aspects of health information. Throughout the course, students receive support services, which address time and stress management techniques. Repeatable to a maximum of 12 semester hours; does not apply to a degree or certificate.
Prereq: C or better in ENG050 or placement by assessment.

## (3 lec/0 lab) <br> 3 sem hrs

## HIT 100 Introduction to Health Information Technology

This course is a comprehensive study of the health information management profession and the health record. It introduces the student to the development of the HIM profession as well as the history, structure and function of the American Health Information Management Association. The structure, content, and standards of the paper-based and electronic health record are also covered in this course. Emphasis is placed on healthcare data sets, data collection, storage and retrieval. Specialized health records, indexes and registries will be described and their functionality explained. Recommended Prereq: Placement in college-level English coursework.
(3 lec/0 lab)
3 sem hrs

## HIT 105 Medical Terms for Health Occupations

This course acquaints students with a method for studying the language of health care. Students learn stems, prefixes and suffixes commonly used in medical terminology.
(1 lec/0 lab)
1 sem hrs

## HIT 110 Medical Terminology

This course is designed to teach word elements of roots, combining forms, suffixes, and prefixes, definitions, spelling and the use of correct abbreviations of medical terms. The course content is organized around body systems and emphasizes the terminology and application related to health information technology.
Recommended Prereq: HIT100 or concurrent enrollment.

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## HIT 120 Medical Office Procedures

Students learn about effective organizational and medical office management, professional organizations, legalities and ethics. The role and responsibilities of the administrative medical assistant are emphasized.
Recommended Prereq: HIT105 or HIT110.
(3 lec/0 lab)
3 sem hrs

## HIT 130 Medical Insurance and Reimbursement

Reimbursement and payment systems of health insurance payers are examined, highlighting private and governmental policies. Major classes of health insurance contracts are examined with emphasis on benefits and limitations.
Recommended Prereq: HIT105 or HIT110;
HIT120 or MLA150.
(3 lec/0 lab) 3 sem hrs

## HIT 135 Health Care Delivery Systems

This course is an overview of the American healthcare system. It includes the study of the main components and issues of the organization, financing and delivery of health services in the U.S. The organization and operation of the modern acute hospital will be described and analyzed. Topics include: the role of federal and state governments, non-acute healthcare facilities, healthcare workforce, managed care, laws, accreditation, licensure and certification standards and reimbursements systems.
Recommended Prereq: HIT100 or concurrent enrollment.
(2 lec/0 lab)
2 sem hrs

## HIT 140 Legal and Ethical Issues in Health Care

Legal and ethical issues applicable to health information are emphasized within this course. Emphasis is placed on the purposes and goals of the Health Insurance Portability and Accountability Act of 1996 (HIPAA) Privacy and Security rules. Course topics examine privacy, confidentiality and the security of the health record, access to patient health information; release of health information (ROI) policies and procedures; professional and practice-related ethical issues in health information management.
Recommended Prereq: HIT100 or concurrent enrollment.
(2 lec/0 lab)
2 sem hrs

## HIT 210 ICD Coding

This course is an introduction to the International Classification of Diseases (ICD) coding principles for services rendered by physicians. Practice in the assignment of valid diagnostic codes is emphasized to orient the students to coding requirements, terminology and characteristics. Repeatable to a maximum of 12 semester hours; 3 semester hours may apply to a degree or certificate.
Prereq: HIT100; HIT220 or concurrent enrollment in HIT220.
(3 lec/0 lab)
3 sem hrs

## HIT 212 Inpatient Medical Coding

This course provides an introduction to basic rules, regulations and principles of the ICD-10PCS inpatient procedural coding classification system. The applied approach of this course will teach students how to construct procedural codes through the appropriate assignment of each code character. Students will apply their skills and acquired knowledge to a variety of inpatient coding scenarios via inpatient recorders, encoder software and AHIMA's Virtual Lab.
Prereq: HIT100; HIT220 or concurrent enrollment in HIT220.
Recommended Prereq: HIT110.
(3 lec/0 lab)
3 sem hrs

## HIT 215 CPT Coding

This course provides an introduction to the guidelines, rules and terms for the Current Procedural Terminology (CPT) and the Center for Medicare/Medicaid Services' Healthcare Common Procedure Coding System (HCPCS) classification systems and the application of those rules to coding patient services. A major focus of the course is to prepare the students to correctly code using the CPT manual.
Repeatable to a maximum of 12 semester hours; 3 semester hours may apply to a degree or certificate.
Prereq: HIT100; HIT220 or concurrent enrollment in HIT220.
(3 lec/0 lab)
3 sem hrs

## HIT 216 Advanced Clinical Classification Systems

This advanced course covers medical necessity, coding issues for specific body systems, and for general conditions. Intensive coding application is achieved through the use of real medical records, case studies, and scenarios using an encoder. DRGs, APC's, RUGs, RBRVs and the Correct Coding Initiative (CCI) are also covered in this course.
Prereq: C or better in HIT210; HIT212; HIT215. (3 lec/0 lab)

3 sem hrs

## HIT 218 Reimbursement Systems

This course will focus on the basic concepts and principles of healthcare reimbursement and medical coding. The current healthcare insurance programs, commercial and government sponsored, will be described in the context of the United States healthcare delivery system. The structure and management of a coding compliance program to meet the internal and external requirements will be described and analyzed. The origins, evolution and principles of managed care will be analyzed as a cost effective approach to deliver and finance healthcare. Prospective payment systems will be differentiated between healthcare settings including inpatient, hospital ambulatory services, physician offices, skilled nursing facilities and home care. The structure and determination of Diagnosis Related Groups and Ambulatory Payment Classifications are analyzed as well as the billing processes and the billing forms used to submit for reimbursement. The management of the revenue cycle is examined.
Prereq: HIT135; HIT216 or concurrent enrollment in HIT216.
(3 lec/0 lab)
3 sem hrs

## HIT 220 Pathophysiology and Pharmacology for the Health Information Technology Professional

A working knowledge of the nature and cause of disease including the etiology, signs, symptoms, diagnostic evaluation, clinical treatment, and pharmacology management of disease processes necessary for a career in the health information profession are presented. Emphasis is on pharmacology for health information professionals covering general principles of drug actions/reactions, major drug classes and specific agents within each class.
Prereq: BIO260.
(3 lec/0 lab)
3 sem hrs

## HIT 230 Data Applications and Health Care Quality

This course presents a comprehensive study of hospital-wide clinical quality assessment, utilization management, risk management and performance improvement. Topics include the organization by-laws, committees and credentialing of the medical staff, as well as the clinical quality assessment, utilization management and risk management process. The course will also focus on the principles and concepts of performance improvement and the tools and techniques used for outcome analysis. Prereq: HIT100; HIT135; HIT140.
(3 lec/0 lab)
3 sem hrs

## HIT 240 Health Information Processes

This course introduces systems and processes for collecting, maintaining and disseminating primary and secondary health related information. It instructs in delivery and organizational structure to include content of health record, documentation requirements, registries, indices, licensing, regulatory agencies, forms and screens.
Prereq: HIT100; HIT135; HIT140.
(3 lec/0 lab) 3 sem hrs

## HIT 245 Health Information Data Analysis

This course provides a detailed study of the impact of computer applications on HIM services and on healthcare information services. In addition, students explore the growth and development of the electronic health record and the field of health informatics. Emphases on the HIM applications include: release of information; use of encoders and groupers; cancer registry; chart locator system; chart deficiency system; and transcription system. The conceptual models and functionality of the electronic health record in the current healthcare environment are defined. The student analyzes the technical components of the electronic health record including: laboratory and pharmacy information systems, picture archiving and communication systems, order sets, clinical protocols, provider order entry, medication administration record, point-of-care charting, and clinical decision support systems. The benefits and barriers of implementing the electronic health record are discussed. Other topics include Admission, Discharge, and Transfer (ADT) system, financial information systems, Master Patient Index, systems development life cycle, data quality integrity and security, document imaging, and maintenance and monitoring of data storage systems.
Prereq: HIT100; HIT135; HIT140.
(2 lec/0 lab)
2 sem hrs

## HIT 248 Organization Resources

The philosophy and functions of human and financial resource management within the healthcare setting are examined. Emphasis is placed on planning, organizing, directing, coordinating and controlling, theories of decision-making, problem-solving, motivation, leadership and communication, in addition to quality and performance improvement, budgeting, the revenue cycle, work processes and goal setting.
Prereq: HIT100; HIT135; HIT140.
(2 lec/0 lab) 2 semhrs

## HIT 290 Professional Practicum Experience

Combining academic credit with professional experience, this Professional Practice
Experience (PPE) is a supervised internship in a medical coding and billing department (typically overseen by the Health Information Management manager) of an acute and/or non-acute healthcare facility or medical billing and coding company. The PPE is designed to provide the student 80 -hours of practical experiences in the theories and concepts previously acquired in the curriculum. This experience may be gained virtually through the use of V-lab.
Prereq: Successful completion of all other coursework in the medical coding and billing curriculum and written permission from the HIT program coordinator.
(1 lec/6 lab)
2 sem hrs

## HIT 299 Professional Practice Experience

Combining academic credit with professional experience, this Professional Practice
Experience (PPE) is a supervised internship in a health information management department of an acute and/or non-acute healthcare facility. The PPE is designed to provide the student 160 hours of practical experiences in the theories and concepts previously acquired in the curriculum. Students are supervised by a Registered Health Information Administrator, Registered Health Information Technician or other qualified personnel assigned by the healthcare facility. Repeatable to a maximum of 6 semester hours on a space available basis; 3 semester hours from the HIT internship course may apply to a degree or certificate. Prereq: To be eligible for placement, the student must complete all required coursework for the Health Information Technology Associate in Applied Science Degree and receive written permission from the HIT Program Coordinator. (1 lec/11 lab)

3 sem hrs

## Heating, Ventilation, and Air Conditioning (HVA)

## HVA 110 Refrigeration Principles

This course introduces the learner to the terminology, concepts and scientific principles used in the refrigeration industry and develops skills in pipefitting, use of hand tools and operation of test instruments used in the refrigeration trade.
(2 lec/2 lab)
3 sem hrs

## HVA 120 HVACR Electrical Systems

This course introduces electrical safety, theory, tools, and test equipment used in the HVACR industry. Major emphasis is placed on wiring and troubleshooting electrical circuits. Labs are done on both electrical trainers as well as live equipment.
(2 lec/2 lab)
3 sem hrs

## HVA 130 Residential Comfort Systems

This course takes an in-depth look at each of the 4 major refrigeration system components and their function in the refrigeration cycle. Different aspects of human comfort related to the HVACR industry will be discussed. Topics include: Indoor Air Quality (IAQ), Psychrometrics, Enthalpy, Ventilation and Dehumidification. Also includes a module on soft skills, pertaining to performing service calls.
(2 lec/2 lab)
3 sem hrs

## HVA 140 Basic Heating Systems

This course discusses the theory, science, and procedures behind heat production for residential and light commercial systems. The student will also develop skills in testing, adjusting, and replacing heating components. (2 lec/2lab)

3 sem hrs

## HVA 150 Basic Sheet Metal Fabrication and Print Reading

This course is designed to provide students with experience in the safe use of sheet metal tools and the methods used to make layouts. Students complete a drawing and fabricate the parts they have drawn and become familiar with HVAC blueprints.
(2 lec/2 lab)
3 sem hrs

## HVA 160 Refrigerant Transition and Certification

This course is intended to prepare students for the certification test required by Section 608 of the Federal Clean Air Act. Repeatable to a maximum of 4 semester hours; 1 semester hour may apply to a degree or certificate.
(1 lec/0 lab)
1 sem hrs

## HVA 200 Sheet Metal Estimating, Fabrication and Installation

Students learn basic procedures of designing, estimating, fabricating and installing ductwork, electrical wiring, and piping for residential comfort systems. Emphasis is placed on pitfalls, problems and inaccuracies that can occur during each of these procedures. Part of the learning experience may include field installation.
Recommended Prereq: All 100-level HVA courses; HVA210; HVA220; HVA230; IDT250.
(2 lec/2 lab)
3 sem hrs

## HVA 205 Heating and Cooling Installation

Advanced topics in HVACR installation, troubleshooting, and maintenance of various HVAC systems are discussed. Course Topics include: Heat pumps (air source and geothermal), mini-split and Variable Refrigerant Flow (VRF) systems. Installation procedures like electrical wiring and system piping are also discussed.
Prereq: HVA110; HVA120.
(2 lec/2 lab)
3 sem hrs

## HVA 215 Commercial HVAC Systems

Students will learn the operating principles, fundamental concepts, and components of commercial HVAC systems. Topics include: Fans, AHUs, Rooftop Units, Chillers, Cooling Towers, Boilers, VAVs, FPBs, and commercial refrigeration units.
Prereq: HVA110; HVA120.
(2 lec/2 lab)
3 sem hrs

## HVA 230 Advanced HVAC Controls

This course introduces commercial building heating and air conditioning systems. Proper calibration and troubleshooting procedures with pneumatic controls are emphasized. Prereq: HVA110; HVA120.
(3 lec/O lab) 3 sem hrs

## HVA 245 Load Calculations and Duct Design

Techniques and procedures necessary to evaluate residential and commercial heat loss, heat gain and duct layout design are presented. Topics include heat transmission, infiltration, R-value, U-valve, duct analysis, duct sizing, duct and register location and selection, and equipment sizing and selection.
Prereq: HVA110; HVA120.
(2 lec/2 lab) 3 sem hrs

## HVA 250 Residential Hydronic Boiler Technology

This course presents an in-depth study in hydronic technologies and the operation of hot water hydronic heating systems. Students receive hands-on experience in installing, troubleshooting, and repairing a hot water boiler, baseboard heat distributing units, and copper piping.
Prereq: HVA110; HVA120.
(2 lec/2 lab)
3 sem hrs

## History (HIS)

## HIS 101 World History to 1500

This course surveys the economic, social, cultural and political history of global peoples and cultures from ancient times to 1500, paying particular attention to the ways in which discrete peoples conceived of and organized themselves and their societies, as well as their regional relationships and interactions with global communities.
IAI: S2 912N.
(3 lec/0 lab)
3 sem hrs

## HIS 102 World History Since 1500

This course surveys the economic, social, cultural and political history of global peoples and cultures from 1500 to the present, paying particular attention to relationships and interactions with global communities.
IAI: S2 913N.
(3 lec/0 lab)
3 sem hrs

## HIS 111 Western Civilization to 1648

This examination of Western civilization reviews the major historical developments from the experiences of the Near Eastern populations, the Greeks and the Romans, through the Middle Ages, and concludes with early modern history to 1648 . The course employs social and cultural history, as well as the more traditional political and economic approaches.
IAI: H2 901.
(3 lec/0 lab)
3 sem hrs

## HIS 112 Western Civilization Since 1648

This examination of Western civilization reviews the major historical developments in modern history from 1648 to the present. The course employs social and cultural history, as well as the more traditional political and economic approaches.

IAI: H2 902.
(3 lec/0 lab)
3 sem hrs

## HIS 121 American History to 1865

This examination of American history reviews the major historical developments from the experiences of the indigenous peoples, the colonial regimes, and nation building through the sectional crisis and concludes with the Civil War. The course employs social, cultural and transnational history, as well as the more traditional political and economic approaches.

IAI: S2 900.
(3 lec/0 lab)
3 sem hrs

## HIS 122 American History Since 1865

This examination of American history reviews the major historical developments from the experiences of Reconstruction and western conquest, the rise of industrial capitalism, and American ascendance as a global power through the Cold War and concludes with contemporary American society. The course employs social and cultural history, as well as the more traditional political and economic approaches, to understand the transnational American experience since 1865.

IAI: S2 901.
(3 lec/0 lab)
3 sem hrs

## HIS 125 American Culture: Colonial Period to the Present

This examination of American history reviews the formation of American culture from the Colonial period to the present within a transnational perspective with particular emphasis on the topics of class, gender, race, and ethnicity. The course also focuses on religion, environmental, philosophical, scientific and other social experiences that have shaped American peoples.
IAI: H2 904.
(3 lec/0 lab)
3 sem hrs

## HIS 205 History of the Middle East

This course surveys the economic, social, cultural and political history of the Middle Eastern peoples and nations from ancient times to the present, paying particular attention to the ways in which Middle Eastern peoples conceived of and organized themselves and their societies, as well as their regional relationships and interactions with the global community.

## IAI: S2 918N.

(3 lec/0 lab)
3 sem hrs

## HIS 215 History of China and Japan

This course surveys the economic, social, cultural and political history of Chinese and Japanese peoples and nations from ancient times to the present, paying particular attention to the ways in which the Chinese and Japanese conceived of and organized themselves and their societies, as well as their regional relationships and interactions with the global community.
IAI: S2 908N.
(3 lec/0 lab)
3 sem hrs

## HIS 220 History of South Asia

This course surveys the economic, social, cultural and political history of South Asian peoples and nations from ancient times to the present, paying particular attention to the ways in which the South Asian peoples conceived of and organized themselves and their societies, their religions, and their regional relationships and interactions with the global community.
(3 lec/0 lab)
3 sem hrs

## HIS 225 History of Africa

This course surveys the economic, social, cultural and political history of the African peoples and nations from ancient times to the present, paying particular attention to the ways in which African peoples conceived of and organized themselves and their societies, as well as their regional relationships and interactions with the global community.

IAI: S2 906N.
(3 lec/0 lab)
3 sem hrs

## HIS 235 Latin American History: Pre-Columbian Period to the Present

This introductory course surveys the historical development of Latin America (Caribbean, Mexico, Central and South America) from Pre-Columbian times to the present. The focus is on the different cultural and ethnic groups of these regions and how conquest, trade and revolution have shaped Latin American nations. Attention is also given to the history of United States-Latin American relations and the history of Latinos in the U.S.
IAI: S2 910N.
(3 lec/0 lab)
3 sem hrs

## HIS 245 The Rise of Nazi Germany

This course surveys the German political scene from unification in 1871 through the era of Nazism. The role of Germany in World War I and the impact of the Treaty of Versailles on the emergence of the national Socialist German Workers' party (NSDAP - Nazis) are examined. In addition, the background and emergence of Nazi racial policies and the consequences of their strict enforcement are analyzed.
(3 lec/0 lab)
3 sem hrs

## HIS 290 Historiography and Methodology

This course introduces students to historiography and the philosophy of history, as well as historical methodology including interdisciplinary approaches.
Recommended Prereq: Consent of instructor.
(1 lec/O lab) 1 sem hrs

## HIS 296 Special Topics/History

This course offers in-depth exploration of a special topic, issue or trend in the history field. Repeatable to a maximum of 12 semester hours for different special topics; 6 semester hours may apply to a degree or certificate.
(. 5 to 3 lec/0 lab)
.5 to 3 sem hrs

# Human Services (HSV) 

## HSV 105 Survey of Human Services

This course is designed to familiarize students with the field of human services. Topics covered include basic communication, interviewing and assessment techniques and diversity issues. Opportunities are provided to visit selected human services agencies/organizations.

## (3 lec/0 lab)

3 sem hrs

## HSV 110 Group Dynamics

Class discussion, lecture and individual observation are used to familiarize students with the group process. Topics include the various types of groups and the appropriate use of group communication techniques. Group projects and class exercises provide opportunities for students to translate theory into practice.

## (3 lec/0 lab) <br> 3 sem hrs

## HSV 115 Crisis Intervention

This course is designed to familiarize students with a variety of crisis situations and appropriate intervention techniques. Opportunity is provided for students to demonstrate intervention skills in simulated crisis situations.
(3 lec/0 lab)
3 sem hrs

## HSV 120 Introduction to Substance Abuse

This course provides an overview of the historical and cultural attitudes toward alcohol and drug use, abuse and addiction. It probes the disease concept of addiction and explores the physical, psychological and family impact of the disease. Clinical methods of treatment, early intervention and prevention are introduced. Although designed for addictions counseling students and human services professionals, the course is also suitable for individuals who desire to learn more about addiction.
(3 lec/0 lab)
3 sem hrs

## HSV 125 Counseling Theories and Strategies

This course is designed to provide students with the most current assessment of the constructs, principles and techniques of major counseling theories. Special emphasis is placed on application to an addicted population.
(3 lec/0 lab)
3 sem hrs

## HSV 140 Assessment and Treatment of the Dual-Disordered Client

This course explores the special needs of clients that are diagnosed with both a substance abuse disorder and a psychiatric disorder and provides students with an understanding of the complexities of working with this population. For students and practitioners that wish to apply for the Mental Illness/Substance Abuse (MISA) registration offered by the Illinois Alcohol and Other Drug Abuse Professional Counseling Association (IAODAPCA), this course has been designed to cover the training required for the MISA credential.
(4 lec/0 lab)
4 sem hrs

## HSV 205 PTSD-Modern Letters for an Ancient Condition

Post-Traumatic Stress Disorder (PTSD) is a relatively new name for an ancient condition that today is most often associated with returning military. PTSD is a condition that can affect many people who have been exposed to multiple forms of psychological or physical trauma. This course provides a historical overview and discussion of the prevalence of PTSD. Additionally, the causes, diagnostic criteria, screening, and an overview of treatment and psycho-pharmacological interventions for this disorder are presented. (1 lec/0 lab)

1 sem hrs

## HSV 210 Psychopharmacology and the Addictive Process

This course studies the behavioral and cognitive effects of psychoactive drugs - drugs that affect the brain and central nervous system. The psychology and physiology of addictive behavior; the use of drugs in treating psychiatric disorders; and the historical background, pharmacology, psychological and physiological effects, medical uses and toxicity of socially abused drugs are also explored. Differences in the attitudes and behavior patterns of special populations are emphasized.
Recommended Prereq: HSV120 or consent of instructor.
(3 lec/0 lab)
3 sem hrs

## HSV 215 Introduction to Social Work

Introduction to Social Work examines social work within the context of social welfare service and social welfare policies, including historical origins, conceptual framework, and contemporary issues. An overview of practice methods, research considerations, policy issues, and social work values and ethics are studied. Emphasis is on the role of social work with diverse and at-risk groupings in America that face societal challenges.
(3 lec/0 lab)
3 sem hrs

## HSV 220 Addictions Counseling I

This course is one of two devoted to the specific methods and skills used in treating chemically dependent persons and their families. Content includes the characteristics of an addictions counselor, federal and state confidentiality laws, legal and ethical issues of counseling, working with denial, structured assessment techniques, family-focused treatment, working with DUI offenders, and counseling strategies.
Recommended Prereq: HSV120 or consent of instructor.
(3 lec/0 lab)
3 sem hrs

## HSV 225 Addictions Counseling II

This course is one of two devoted to the specific methods and skills used in treating dependent persons and their families. Content includes selected state and federal regulations and standards; the significance of the family, spirituality and education in counseling abusers; substance abuse and psychiatric conditions; and professional considerations for the addictions counselor.
Recommended Prereq: HSV120 or consent of instructor.
(3 lec/0 lab)
3 sem hrs

## HSV 230 Addictions Counseling Seminar and Field Experience I

This course, designed to provide training and familiarity in a human services setting, combines a supervised field experience with an on-campus seminar. Students spend 250 hours experiencing on-the-job training at a human services agency.
Recommended Prereq: Completion of most courses in the HSV degree and consent of instructor.
(1 lec/2 lab) 3 sem hrs

## HSV 235 Human Services Seminar and Field Experience

This course provides a supervised field experience and seminar designed specifically for addictions counseling students. Students spend 320 hours in on-the-job training at an addictions counseling facility and meet in a weekly seminar for group supervision. Recommended Prereq: HSV220 or HSV225 within the last five years and consent of instructor.
(1 lec/3 lab) 4 sem hrs

## HSV 240 Addictions Counseling and Field Experience II

This course continues the addictions counseling seminar and field experience. Students spend an additional 250 hours developing skills in on-the-job training, and they attend a weekly seminar for group supervision.
Recommended Prereq: HSV235 and consent of instructor.
(1 lec/2 lab)
3 sem hrs

## HSV 294 Special Topics for Public/ Social Services I

This course offers in-depth exploration of a special topic, issue or trend in the public/social services field. Repeatable to a maximum of 12 semester hours for different special topics; 6 semester hours from the human services special topics courses (HSV294, HSV295, HSV296) may apply to a degree or certificate.
(1 to 3 lec/O lab)
1 to 3 sem hrs

## HSV 295 Special Topics for Public/ Social Services II

This course offers in-depth exploration of a special topic, issue or trend in the public/social services field. Repeatable to a maximum of 12 semester hours for different special topics; 6 semester hours from the human services special topics courses (HSV294, HSV295, HSV296) may apply to a degree or certificate.
(1 to 3 lec/0 lab)
1 to 3 sem hrs

## HSV 296 Special Topics for Public/ Social Services III

This course offers in-depth exploration of a special topic, issue or trend in the public/social services field. Repeatable to a maximum of 12 semester hours for different special topics; 6 semester hours from the human services special topics courses (HSV294, HSV295, HSV296) may apply to a degree or certificate.
(1 to 3 lec/O lab)
1 to 3 sem hrs

## Humanities (HUM)

## HUM 101 Survey of the Humanities

This is a broad course which introduces students to a view of their inherited culture through the examination of literature, art, music, architecture, philosophy, drama film and religion. The emphasis is twofold: on cultural history and on the present. Materials are organized in terms of issues and ideas.
Note: Participation in this course may include field trips which require admission fees.
IAI: HF 900.
(3 lec/0 lab)
3 sem hrs

## HUM 102 The Global Village

This general humanities course introduces the student to the literature, art, music, religion and film of several continents of the world. The emphasis is on a worldwide understanding of the humanities.
Note: Participation in this course may include field trips which require admission fees.
IAI: HF 904N.
(3 lec/0 lab)
3 sem hrs

## HUM 201 Modern Culture and the Arts

This course provides experiences in contemporary art forms in literature, music and graphics, and discusses the forces influencing these arts in the 20th and 21st centuries. An investigation of the values of a culture inundated by changing technology is also included.
Note: Participation in this course may include field trips which require admission fees.

IAI: HF 903.
(3 lec/0 lab)
3 sem hrs

## HUM 296 Special Topics/Humanities

This course offers in-depth exploration of a special topic, issue or trend in the field of humanities. Repeatable to a maximum of 12 semester hours for different special topics; 6 semester hours may apply to a degree or certificate.
(1 to 3 lec/0 lab)
1 to 3 sem hrs

## Independent Study (IND)

## IND 200 Independent Study

The independent study course provides students with the opportunity to explore areas of special interest that expand on their classroom studies or develop their knowledge in a particular discipline. Repeatable to a maximum of 4 semester hours; 4 semester hours of the independent study courses (IND200, IND201) may apply to a degree or certificate.
Prereq: Consent of instructor.
(0 lec/3 lab)
1 sem hrs

## IND 201 Independent Study

The independent study course provides students with the opportunity to explore areas of special interest that expand on their classroom studies or develop their knowledge in a particular discipline. Repeatable to a maximum of 8 semester hours; 4 semester hours of the independent study courses (IND200, IND201) may apply to a degree or certificate.
Prereq: Consent of instructor.
(0 lec/6 lab)
2 sem hrs

## Industrial <br> Technology (IDT)

## IDT 230 Commercial Power Distribution and Lighting

This course examines commercial and light industrial electrical power distribution systems and end uses. Topics include lighting circuits, transformers, 3-phase distribution panels, and typical single phase loads along with associated wiring.
Recommended Prereq: IDT115.
(2 lec/2 lab)
3 sem hrs

## IDT 250 Commercial and Residential Wiring

This course introduces students to basic electrical terminology and principles along with a working knowledge of tools and techniques used in the installation and maintenance of residential/commercial electrical service and distribution. Select portions of the National Electrical Code are studied.
Recommended Prereq: ELT101 or concurrent enrollment.
(2 lec/2 lab)
3 sem hrs

## IDT 290 Industrial Technology Capstone

This capstone course includes field experience and a seminar component. Each student is required to pass a comprehensive examination that measures knowledge and understanding of the core competencies of the courses in the major program requirements. The site supervisor's evaluation of the student's performance, the review of the student's field experience journal, participation in the monthly seminars, and appraisal of the student's elective coursework will provide the basis for faculty to assess the student's integration and application of specialized coursework in the degree. Prereq: Consent of instructor.
(. 5 lec/1 lab)

1 sem hrs

## IDT 296 Special Topics for Industry

This course offers in-depth exploration of a special topic, issue or trend in the industrial technology field. Topics might include vibration analysis; pump design, troubleshooting and maintenance; failure analysis; industrial lighting systems; and supervision and leadership in the maintenance field. Repeatable to a maximum of 12 semester hours for different special topics; 6 semester hours may apply to a degree or certificate.
(1 to 3 lec/0 lab)
1 to 3 sem hrs

## IDT 297 Industrial <br> Technology Internship

Combining academic credit with professional experience, this internship allows students to learn about, observe and work in the industrial technology field. Eighty hours are required for 1 credit. Repeatable to a maximum of 4 semester hours; 6 semester hours from the industrial technology internship courses (IDT297, IDT298, IDT299) may apply to a degree or certificate.
Prereq: All 100-level IDT courses; consent of instructor.
(0 lec/5 lab)
1 sem hrs

## IDT 298 Industrial <br> Technology Internship

Combining academic credit with professional experience, this internship allows students to learn about, observe and work in the industrial technology field. One hundred sixty hours are required for 2 credits. Repeatable to a maximum of 8 semester hours; 6 semester hours from the industrial technology internship courses (IDT297, IDT298, IDT299) may apply to a degree or certificate.
Prereq: All 100-level IDT courses; consent of instructor.
(0 lec/10 lab)
2 sem hrs

## IDT 299 Industrial <br> Technology Internship

Combining academic credit with professional experience, this internship allows students to learn about, observe and work in the industrial technology field. Two hundred forty hours are required for 3 credits. Repeatable to a maximum of 12 semester hours; 6 semester hours from the industrial technology internship courses (IDT297, IDT298, IDT299) may apply to a degree or certificate.
Prereq: All 100-level IDT courses; consent of instructor.
(0 lec/15 lab)
3 sem hrs

## Interdisciplinary Studies (IDS)

## IDS110 Introduction to Women's Studies

This interdisciplinary course places women's experiences at the center of interpretation and analysis to introduce basic concepts and perspectives of feminism and Women's Studies. Focusing on historical and contemporary women's issues, the course examines women's lives with an emphasis on the ways in which gender, sexuality, class, caste, race, ethnicity, age, disability, ability, nation, region and environment interact.
(3 lec/0 lab)
3 sem hrs

## IDS 210 Peace Studies and Conflict Resolution

This interdisciplinary course provides an introduction to non-violent approaches to personal, national and global conflicts. Students explore historical, philosophical, political, economic and psychological factors that often lead to violence and the non-violent alternatives for a more equitable, just and peaceful world.
(3 lec/0 lab)
3 sem hrs

## IDS 220 Human Rights and Social Justice

This course focuses on values and human rights that allow people to live with dignity and justice. Students examine areas in which human rights have been, and possibly still are, abused, and study the treaties, declarations, organizations, and laws that have been established to provide people with equality and social justice. Issues covered include racial discrimination, gender equality, rights of people with disabilities, LGBTQ rights, immigration, refugees, torture, prisons, and genocide.
(3 lec/0 lab)
3 sem hrs

## IDS 296 Special Topics for Interdisciplinary Studies

This course offers in-depth exploration of a special topic, issue or trend in interdisciplinary studies and may integrate two or more disciplines. Repeatable to a maximum of 12 semester hours for different special topics; 6 semester hours may apply to a degree or certificate.
(0 to 3 lec/0 to 6 lab) 1 to 3 sem hrs

## Internship (ITS)

## ITS 297 Internship

Combining academic credit with professional experience, this internship allows students to learn about, observe and work in areas that expand on their classroom studies in a particular discipline. Eighty hours are required for 1 credit. Repeatable to a maximum of 4 semester hours; 6 semester hours from the internship courses (ITS297, ITS298, ITS299) may apply to a degree or certificate. Prereq: Consent of instructor.

## (0 lec/5 lab)

1 sem hrs

## ITS 298 Internship

Combining academic credit with professional experience, this internship allows students to learn about, observe and work in areas that expand on their classroom studies in a particular discipline. One hundred sixty hours are required for 2 credits. Repeatable to a maximum of 6 semester hours; 6 semester hours from the internship courses (ITS297, ITS298, ITS299) may apply to a degree or certificate.
Prereq: Consent of instructor.
(0 lec/10 lab)
2 sem hrs

## ITS 299 Internship

Combining academic credit with professional experience, this internship allows students to learn about, observe and work in areas that expand on their classroom studies in a particular discipline. Two hundred forty hours are required for 3 credits. Repeatable to a maximum of 6 semester hours; 6 semester hours from the internship courses (ITS297, ITS298, ITS299) may apply to a degree or certificate.
Prereq: Consent of instructor.
(0 lec/15 lab)
3 sem hrs

## Interpreter Training (ITP)

See also Sign Language (SGN).

## ITP 200 Introduction to Interpreting

This course is designed to provide an introduction to the profession of interpreting. The course details the ethical and professional responsibilities of the interpreter, defines the interpreting process, and presents terminology common to the profession.
Prereq: Program admission; successful completion of all SGN courses.
Coreq: ITP210; ITP211; ITP221; ITP231.
(3 lec/O lab) 3 sem hrs

## ITP 210 Etymology for Interpreters

This course is designed to increase sign development for interpreters. Emphasis is given to the analysis of word meanings in various contexts, correct fingerspelling, and the correct selection and production of sign equivalents. Students are also introduced to the theory and history of transliterating as well as specific strategies to employ when voice to sign transliterating.
Prereq: Program admission; successful completion of all SGN courses.
Coreq: ITP200; ITP211; ITP221; ITP231.
(3 lec/0 lab) 3 sem hrs

## ITP 211 Transliterating I

This course is designed to assist students in developing the requisite skills necessary for successful voice to sign transliterating. Course work focuses on sign productions, fluency, speed, conceptual sign choices, clarity, mouth movements, affect and the incorporation of ASL principles. The course includes a review of basic sign vocabulary and the introduction of additional specialized sign vocabulary. Prereq: Program admission; successful completion of all SGN courses.
Coreq: ITP200; ITP210; ITP221; ITP231.
(3 lec/O lab)
3 sem hrs

## ITP 212 Transliterating II

This course is designed to assist students in developing advanced voice to sign transliterating skills with a focus on expanding technical sign vocabulary and increasing speed and conceptual accuracy. Students are also introduced to the process of technical development and sign standardization.
Prereq: Program admission; ITP200; ITP210; ITP211; ITP221; ITP231.
Coreq: ITP222; ITP223; ITP230; ITP232.
(3 lec/0 lab)
3 sem hrs

## ITP 221 Interpreting I

This course is designed to familiarize students with techniques of consecutive and simultaneous interpreting. It includes a systematic review of basic differences in the grammatical structure and rules of American sign language and spoken English.
Prereq: Program admission; successful
completion of all SGN courses.
Coreq: ITP200; ITP210; ITP211; ITP231.
(3 lec/0 lab)
3 sem hrs

## ITP 222 Topics in Interpreting

The goal of this course is to familiarize students with the role of the interpreter in a wide variety of specialized settings. The course explores the protocol for working with oral and deafblind consumers, specialized sign vocabulary for 12-step programs, and techniques for artistic interpreting. The course also promotes the development of both interpreting and transliterating skills through vocabulary expansion in ASL and English.
Prereq: Program admission; ITP200; ITP210; ITP211; ITP221; ITP231.
Coreq: ITP212; ITP223; ITP230; ITP232.
(3 lec/0 lab)
3 sem hrs

## ITP 223 Interpreting II

This course is designed to provide students with an opportunity to develop more advanced skills in simultaneous interpreting and discourse analysis.
Prereq: Program admission; ITP200; ITP210; ITP211; ITP221; ITP231.
Coreq: ITP212; ITP222; ITP230; ITP232.
(3 lec/0 lab)
3 sem hrs

## ITP 230 Specialized Areas of Interpreting

This course is an online introduction to the nature, techniques and implications of interpreting in the educational, medical, religious, mental health and legal settings. Students also prepare for the written and performance portions of the national certification evaluation and begin field experience.
Prereq: Program admission; ITP200; ITP210; ITP211; ITP221; ITP231.
Coreq: ITP212; ITP222; ITP223; ITP232.
(3 lec/0 lab)
3 sem hrs

## ITP 231 Sign to Voice I

Sign to Voice I is designed to assist students in developing the requisite skills for successful sign to voice interpreting. This course focuses on improving receptive skills, developing appropriate ethical/professional behavior and utilizing public speaking techniques. The course provides extensive practice with consecutive and simultaneous voice interpreting.
Prereq: Program admission; successful completion of all SGN courses.
Coreq: ITP200; ITP210; ITP211; ITP221. (3 lec/O lab) 3 sem hrs

## ITP 232 Sign to Voice II

Sign to Voice II is designed to assist students in developing advanced voicing skills. This course focuses on improving concentration and listening, giving feedback on performances, working as a member of a voicing team, and preparing for formal sign to voice interpreting presentations.
Prereq: Program admission; ITP200; ITP210; ITP211; ITP221; ITP231.
Coreq: ITP212; ITP222; ITP223; ITP230.
(3 lec/0 lab) 3 sem hrs

## ITP 290 The Interpreter as Practitioner

This course is designed to teach students how to apply their sign skills and knowledge of the interpreting role in a variety of reallife situations. As they are completing their field experiences, students are asked to share experiences from their respective sites and formulate responses that reflect appropriate professional conduct and are in accordance with the Registry of Interpreters for the Deaf, Code of Professional Conduct. In addition, students explore the role and responsibilities of the interpreter in three specialized areas: traffic court, a medical office visit and a mental health interview. The protocol for working with a deaf interpreter is also discussed.
Prereq: Program admission; successful
completion of all other ITP courses;
demonstrated proficiency per the ITP guidelines.
(3 lec/0 lab)
3 sem hrs

## Japanese (JPN)

## JPN 101 Elementary Japanese I

This course is designed for students who have no previous knowledge of Japanese. The course presents a basic foundation that enables students to acquire and develop language skills in listening, speaking, reading and some writing.
(3 lec/0 lab)
3 sem hrs

## JPN 102 Elementary Japanese II

This course is a continuation of JPN101 with emphasis on increased accuracy in listening, speaking skills, reading and writing. Recommended Prereq: JPN101.

## Laboratory Technology (LBT)

## LBT 100 Lab Safety

This introductory course focuses on safe procedures in any lab. Topics such as the safe handling of chemicals and the safe disposal of materials will be covered. For those students who are already working in a lab setting, substitution of this course may be possible with consent of instructor.
(1 lec/ lab)
1 sem hrs

## LBT 101 Fundamentals of Laboratory Technology

This course introduces students to the work involved in a career as a laboratory technician and provides hands-on experience working in the laboratory environment. Topics include lab techniques and data management. This course incorporates methods to increase study and work strategies for optimal achievement in college and the workplace.
Recommended Prereq: CIS110 or CIS 111 or concurrent enrollment. Prereq: LBT100 or CHM121.
(1 lec/3 lab)
2 sem hrs

## LBT 221 Lab Applications of Microbiology

This course emphasizes developing laboratory technical skills in the handling, cultivation and isolation of microorganisms used in an industrial, commercial, or research laboratory setting. This course is not suitable for students majoring in biology or any other health profession.
Recommended Prereq: BIO120 or industrial lab experience. Prereq: LBT100 or CHM121; LBT101.
(3 lec/3 lab)
4 sem hrs

## LBT 251 Lab Instruments I

In this course, students are introduced to analytical techniques including gravimetric, titrametric and electrochemical analysis. Students learn to manipulate data in required calculations, applying statistics when appropriate.
Prereq: LBT101 or CHM 121 or both CHM100 and CHM101.
(2 lec/2 lab)
3 sem hrs

## LBT 252 Lab Instruments II

This course introduces students to instrumentation used in laboratory settings. Topics include theory and instrumentation related to spectroscopy and chromatography, use of instruments and interpretation of data. Prereq: LBT251.
(2 lec/2 lab)
3 sem hrs

## LBT 260 Environmental Labs

Students in this class will operate state-of-theart analytical instruments to test materials using government, regulatory, and industry standards. Students will learn to test for traces of hydrocarbons, petrochemicals, metals, contaminants, and other materials.
Prereq: LBT252.
(1 lec/3 lab)
2 sem hrs

## LBT 270 Food Analysis Labs

This course focuses on the principles of laboratory work when applied to food processing, food ingredients such as additives and minerals, food flavoring, and food safety. Topics such as HACCP, food modifications, and enzymes are also covered. Students will use equipment to do relevant lab experiments. Prereq: LBT252.
(1 lec/3 lab)
2 sem hrs

## LBT 280 Current Issues in Chemical Lab

Students in this class analyze and research issues, trends, and ethics in laboratory technology. They use state-of-the-art equipment to run drug, chemical, and biological tests and experiments in order to further their research.
Prereq: LBT252.
(1 lec/3 lab)
2 sem hrs

## Legal Interpreting (LGI)

## LGI 100 Introduction to Legal Interpreting: English/Spanish

Introduction to Legal Interpreting examines in detail the ethics and professional conduct required of legal interpreters. Students are also provided an overview of the United States judicial system and appropriate modes of interpreting in the legal setting.

## (3 lec/0 lab)

3 sem hrs

## LGI 105 Legal System and Terminology: English/Spanish

Legal System and Terminology examines the United States judicial system including the criminal, juvenile and civil courts; provides extensive practice with specialized legal terminology in both English and Spanish; and reviews the English language skills needed for interpreting including vocabulary, synonyms, antonyms and idioms.
Prereq: C or better in LGI100; native or nearnative fluency in Spanish and English.
(3 lec/0 lab)
3 sem hrs

## LGI 110 Legal Interpreting: Simultaneous, Consecutive and Sight: English/Spanish

Legal Interpreting: Simultaneous, Consecutive and Sight provides the student with structured practice in the three modes of legal interpreting. This class prepares students to successfully meet the performance outcomes of the Consortium for State Court Interpreter Certification.
Prereq: C or better in LGI100.
(3 lec/0 lab) 3 sem hrs

## LGI 120 Introduction to Legal Translation: English/Spanish

This course is an introduction to the translation of legal documents. This course provides exposure to the identification, definition and translation of legal terms in order to convey the intended meaning in the source language. Recommended Prereq: Native or near-native fluency in English and Spanish.
(3 lec/0 lab)
3 sem hrs

## LGI 290 Legal Interpreting Seminar and Field Experience: English/ Spanish

This course provides 80 hours of on-the-job experience in the legal interpreting setting for legal interpreting students.
Prereq: Successful completion of all other program courses or concurrent enrollment. (. $5 \mathrm{lec} / 5 \mathrm{lab}$ )
1.5 sem hrs

## Machine <br> Tool Technology (MTT)

## MTT 100 Safety Principles

This course provides an understanding of safe work practices with a focus on the Occupational Safety and Health Administration (OSHA) safety guidelines. Students may obtain the OSHA 10 Hour card.
(1 lec/0 lab)
1 sem hrs

## MTT 102 Manual Machine Shop Operations

This is an introduction to manual machine shop operations. Topics include safety, interpreting manufacturing prints, manual mill operations, manual lathe operations, mechanical inspection and technical mathematics.
Coreq: MTT100
Recommended Coreq: MTT110
(1 lec/4 lab) 3 sem hrs

## MTT 103 Manufacturing Processes and Production

This course is an introduction on how manufacturing transforms materials into products. Students will learn about the varying types of production and about the materials used in production while becoming familiar with the types of processes used in manufacturing including machining, casting and assembly. Students are prepared for a portion of the MSSC Certified Production Technician (CPT) assessment.
(2 lec/0 lab)
2 sem hrs

## MTT 104 Maintenance Awareness

This course introduces the concepts of Total Productive Maintenance (TPM) and preventative maintenance. Students are introduced to lubrication, electricity, hydraulics, pneumatics, and power transmission systems. Students are prepared for a portion of the MSSC Certified Production Technician (CPT) assessment.
(2 lec/0 lab)
2 sem hrs

## MTT 105 Green Production

This course provides a study of workplace activities across all industries within manufacturing that require the use of equipment, technologies, and processes that will improve the environmental performance of manufacturing companies. Students are prepared for a portion of the MSSC Certified Production Technician (CPT) assessment. (2 lec/lab)

2 sem hrs

## MTT 106 Computer Integrated Manufacturing

Computer-integrated manufacturing (CIM) is the manufacturing approach of using computers to control the entire production process. This integration allows individual processes to exchange information with each other and initiate actions. In a CIM system functional areas such as design, analysis, planning, purchasing, cost accounting, inventory control, and distribution are linked through the computer with factory floor functions such as materials handling and management, providing direct control and monitoring of all the operations.
(3 lec/0 lab)
3 sem hrs

## MTT 110 Print Reading for the Trades

Principles and concepts of interpreting blueprints of machined parts, electricity, and hydraulic systems are covered. Topics include exploded view, details, ladder diagrams, and fluid power.
(3 lec/0 lab)
3 sem hrs

## MTT 111 Metrology/Mechanical Inspection

Principles of dimensional measurement are covered, with a focus on the terminology, methodology, and practice of measurement systems and equipment in the calibration and the use of basic measuring tools.
Recommended Prereq: MTT110; MTT120.
(2 lec/0 lab)
2 sem hrs

## MTT 112 Properties of Materials

This is a study of metals and their properties, including application of metallurgical concepts, procedures, and testing. Includes materials, alloy classification systems, industrial and manufacturing concepts, properties and testing, and industrial and manufacturing processes and applications.
(3 lec/0 lab)
3 sem hrs

## MTT 120 Introduction to Computer Numerical Control

Introduction into computer numerical controls (CNC) used on industrial machining centers. Topics include the economics, setup, and operations of CNC equipment used to manufacture consumer goods. Students will begin to prepare for National Institute for Metalworking Skills (NIMS) certifications. Prereq: MTT100.
Recommended Coreq: MTT110.
(1 lec/2 lab)
2 sem hrs

## MTT 125 CNC Mill Operations and Programming

The set-up, operation, and programming of computer numerical control (CNC) vertical machining centers is presented. Fundamentals in CNC concepts and programming are presented. Topics include shop safety, positioning and coordinate systems used in CNC programming, part programming, cutting processes, diagnosis and correction of programming errors, and advanced programming techniques used in production machining. Students will be using Haas vertical machining centers and will have the opportunity to test for their National Institute for Metalworking Skills (NIMS) level 1 operator, setup, and programming credential.
Prereq: MTT100; MTT110.
Recommended Prereq: MTT120.
(1 lec/4 lab)

## MTT 126 CNC Lathe Operations and Programming

This continuation of CNC Operations focuses on lathe programming. It includes a review of CNC concepts and programming, diagnosis and correction of programming errors, advanced programming for CNC lathes, and introduction to Computer Aided Machining (CAM) programs.
Prereq: MTT100; MTT110.
Recommended Coreq: MTT120.
(1 lec/4 lab)
3 sem hrs

## MTT 200 Advanced CNC Programming

This is a study of the computer aided manufacturing methodologies used by industry to aid CNC programming of two axis machining for both lathe and mill applications. Repeatable to a maximum of 12 semester hours; 3 semester hours may apply to a degree or certificate.
Recommended Prereq: MTT125 or MTT126. Prereq: MTT120 or consent of instructor. (1 lec/4 lab)

3 sem hrs

## MTT 202 Job Shop Processes

This is an advanced study of machining processes used to complete industry related machining projects. Students will finish their degree by working on manufacturing parts supplied and supported by local industry partners. Students will also be able to test for National Institute of Metalworking Skills (NIMS) certifications in manual mill, lathe, and level II CNC machining.
Recommended Prereq: MTT125; MTT126; МTT200.
Prereq: MTT102; MTT110.
(1 lec/4 lab)
3 sem hrs

## Management (MGT)

See also Industrial/Organizational Psychology (PSY 245).

## MGT 200 Principles of Management

This course introduces management practices and theories with an emphasis on planning, organizing, leading, controlling, and the ethical implications of management practices. A comprehensive perspective on the application of management techniques within all types of organizations is presented.
Recommended Prereq: BUS100.
(3 lec/0 lab)
3 sem hrs

## MGT 210 Supervisory Management

This course examines the duties, responsibilities and challenges of effective supervision. Emphasis is placed on communication and human relation skills as they relate to performing the basic managerial functions of the front-line supervisor.
(3 lec/0 lab)
3 sem hrs

## MGT 215 Human Resources Management I

This organizational overview relates to personnel in business. Emphasis is placed on behavioral theory and practical analytical techniques as it relates to job design, performance evaluation techniques, management-labor relations, current employment law, wage and salary administration, training programs, and everyday issues in the workplace. Recommended Prereq: BUS100.
(3 lec/0 lab)
3 sem hrs

## MGT 220 Human Resources Management II

This advanced survey of human resources management and personnel administration topics emphasizes recruitment and selection strategies, compensation and reward management, training and development, and labor relations.
Recommended Prereq: BUS100; BUS210,
MGT200. Prereq: MGT215.
(3 lec/0 lab)
3 sem hrs

## Marketing (MKT)

## MKT 200 Principles of Marketing

Business free market activities related to the distribution of goods and services are studied with an emphasis on marketing strategy, the marketing mix, pricing, distribution channels, promotion, product development, consumer behavior and global marketing.
Recommended Prereq: BUS100.
(3 lec/0 lab)
3 sem hrs

## MKT 210 Principles of Selling

The fundamentals and techniques of successful selling include developing the sales personality, the selling cycle, and customer and community relations. Emphasis is placed on creative selling, sales ethics, the organization and the customer.
(3 lec/0 lab)
3 sem hrs

## MKT 215 Principles of Advertising

This introduction to the theory and mechanics of marketing-related communications places primary emphasis on the role of advertising in integrated marketing communications, environment, promotional strategies, research, planning, media selection, program management and evaluation. Various advertising media are discussed, as well as the creation of a total advertising message. Other topics include consumer behavior, creative strategies and types of media. The student prepares practical marketing applications for various industries.

IAI: MC 912.
(3 lec/0 lab)
3 sem hrs

## MKT 260 Consumer Behavior

This course seeks to make a connection between customer behavior principles and the elements of marketing strategy. Customers, both in the household and the business market, are examined. Consumer behavior looks at culture demographics, psychographics and other factors that influence decision making.
(3 lec/0 lab)
3 sem hrs

Mass
Communication (MCM)

## MCM 130 Introduction to Mass Communication

Introduction to Mass Communication surveys the nature and impact of media on contemporary society. Areas of emphasis include: mass communication theory and research, ethics and social responsibilities, historical development, communication technologies, business practices, and media regulation and control.

IAI: MC 911.
(3 lec/0 lab)
3 sem hrs

## MCM 140 Television and Media Production I

Television and Media Production I provides production experiences in multiple-camera studio production and on-location video production and recording. Production responsibilities, studio and control room equipment operation, script and graphics preparation, set design and lighting, and talent/performance techniques, as well as the U.S. system of regulation and control of broadcasting are emphasized.

IAI: MC 916.
(2 lec/2 lab)
3 sem hrs

## MCM 201 Broadcast Writing

This course focuses on writing broadcast copy and scripts for visual and audio presentations for news and special events. Students learn to research, compose, and edit standard script formats for radio and television, as well as to distinguish between broadcast and print writing styles. Students also learn about ethical considerations in the news, libel laws, effective interview techniques, and interview etiquette.
(3 lec/0 lab)
3 sem hrs

## MCM 205 Basic Broadcast Announcing

This course provides students with a general knowledge of broadcast announcing principles and techniques. Students are required to create, read and deliver commercials, news, interviews, public service announcements and special events. Emphasis is placed upon developing an appropriate broadcasting style, operating broadcast studio equipment and developing impromptu on-air skills. Additionally, students analyze, edit and deliver broadcast copy. Prereq: MCM130.
IAI: MC 918.
(2 lec/2 lab)
3 sem hrs

## MCM 211 Introduction to Radio Production

This course provides learning experiences in audio production techniques and the operation of related equipment and systems. Topics such as basic radio production protocol, terminology, script writing, editing, producing commercial/ PSA announcements and newscasting in a studio setting are emphasized.
Prereq: MCM130.
IAI: MC 915.
(2 lec/2 lab)
3 sem hrs

## MCM 215 Basic News Writing

This course introduces students to the basic elements of clear, concise, accurate and balanced news writing. Students learn the techniques of news gathering, reporting, and interviewing as well as important differences between straight news stories, features, opinion pieces and various other types of news articles. Additionally, the course includes discussion of ethical issues facing the press and laws governing journalists.
Prereq: ENG101 or ENG152 or concurrent enrollment.
IAI: MC 919.
(3 lec/0 lab)
3 sem hrs

## MCM 240 Television and Media Production II

This course provides more advanced multicamera studio television and media production experience with an emphasis toward live-to-record/live-broadcast situations. Students assume production roles both in the control room and studio setting. Pre- and postproduction, scripting, graphics set design and lighting, system process engineering, and postproduction skills are also emphasized.
Prereq: MCM140.
(2 lec/2 lab)
3 sem hrs

## MCM 243 Film Production

This course provides more advanced field television and film production experience with an emphasis toward single-camera electronic field production (EFP) and electronic news gathering (ENG). Students assume production roles as producers, directors, camera operators, and video editors. Pre- and post-production, scripting, graphics, lighting, legal requirements and non-linear video editing skills are emphasized.
Recommended Prereq: MCM140 or consent of instructor.
(2 lec/2 lab)
3 sem hrs

## MCM 245 Mass Media Ethics and Laws

This course examines the legal and judicial systems, governing legislation, and significant historical/contemporary issues that influence various industries and consumers of mass communication. Special emphasis is given to first amendment rights, libel and invasion of privacy, protection of news sources, free press, and copyright legislation and court rulings. Recommended Prereq: MCM130 or concurrent enrollment.
(3 lec/0 lab)
3 sem hrs

## MCM 280 Mass Communication Capstone: The Business, Media and Careers of TV/ Radio/Film

This course provides students with a deeper understanding of the broadcasting industries--the business and economic structures, current and developing media technologies of acquisition and transmission and the career opportunities within each. Students also focus on formats, ratings, programming, state/federal regulations, digital transmission and video streaming. Hands-on practical information and skills assist students in the creation of resumes and portfolio materials.
Recommended Prereq: MCM130 and 3 additional MCM courses. Prereq: Consent of instructor.
(2 lec/2 lab)
3 sem hrs

## MCM 296 Special Topics/Mass Communication

This course offers in-depth exploration of a special topic, issue or trend in the mass communication field. Topics might include current events, film genre, specialized film/ television projects, and more in-depth analyses of industry trends. Repeatable to a maximum of 12 semester hours for different special topics; 6 semester hours may apply to a degree or certificate.
(0 to 3 lec/0 to 6 lab)
1 to 3 sem hrs

## Mathematics (MTH)

NOTE: Placement in mathematics courses is determined by scores on required assessment tests or ACT or SAT scores. The geometry requirement may be met by verification of successful completion of high school geometry. To request a review of your high school transcript to verify your ACT scores and geometry completion, email mathplacement@waubonsee.edu.

## MTH 050 Basic Mathematical Skills

This course is a review of the structure and applications of arithmetic. Topics covered include the addition, subtraction, multiplication, and division of decimals and fractions.
(2 lec/0 lab) 2 sem hrs

Course Descriptions
Mathematics

## MTH 060 Elementary Algebra

This course in beginning algebra covers algebraic expressions, equations, inequalities, problem solving, graphing, polynomials, factoring, rational expressions and rational equations.
Prereq: C or better in MTH050 or placement by assessment.
(4 lec/0 lab)
4 sem hrs

## MTH 061 Elementary Algebra I

This course in beginning algebra covers algebraic expressions, equations, inequalities, problem solving, graphing, and polynomials.
Note: This is the first course in a two-course sequence. Prereqs must be met before taking this course.
Prereq: C or better in MTH050 or placement by assessment.
(2 lec/0 lab)
2 sem hrs

## MTH 062 Elementary Algebra II

This continuation of beginning algebra covers polynomials, factoring, rational expressions, and rational equations.
Note: This course is for science, math, business, and education majors. If you are a different major, please see an advisor. This is the second course in a two-course sequence. Prereq: C or better in MTH061 or placement by assessment.
(2 lec/0 lab)
2 sem hrs

## MTH 066 Mathematics Literacy I

This course focuses on solving realistic problems, gaining number sense, and improving mathematical literacy.
Note: This is the first course in a two-course sequence. Prereqs must be met before taking this course. In addition to the textbook, an access code is required for this class. Prereq: C or better in MTH050 or placement by assessment.
(3 lec/0 lab)
3 sem hrs

## MTH 067 Mathematics Literacy II

This second course in Math Literacy continues to focus on solving realistic problems, further improving number sense and mathematical literacy.
Note: This is the second course in a twocourse sequence. Prereqs must be met before taking this course. In addition to the textbook, an access code is required for this class. Prereq: C or better in MTH066.
(3 lec/0 lab)
3 sem hrs

## MTH 070 Intermediate Algebra

This course in intermediate algebra covers functions, systems of linear equations, inequalities, exponents and radicals, quadratic equations, and exponential and logarithmic functions.
Prereq: C or better in MTH060 or MTH062 or MTH067; or placement by assessment.
(4 lec/0 lab)
4 sem hrs

## MTH 071 Intermediate Algebra I

This course in intermediate algebra covers functions, systems of linear equations, inequalities, absolute value equations, and systems of inequalities.
Note: This is the first course in a two-course sequence for science, math, business, and education majors. If you have a different major, you should enroll in MTH066 and MTH067.
Prereq: C or better in MTH062 or MTH067; or placement by assessment.
(2 lec/0 lab)
2 sem hrs

## MTH 072 Intermediate Algebra II

This course in intermediate algebra covers exponents and radicals, quadratic equations, and exponential and logarithmic functions. Note: This is the second course in a twocourse sequence for STEM, business, and education majors. If you have a different major, you should enroll in MTH066 and MTH067. The next choices in math courses are 101, 102, 107, 111, 112, 201. See an advisor to make the best choice for you. Prereq: C or better in MTH071; or placement by assessment.
(2 lec/0 lab)
2 sem hrs

## MTH 075 Elementary Geometry

This elementary geometry course covers the language of geometry, similarity, congruence, properties of points, lines, triangles, rectangles, parallelograms, squares, trapezoids, other quadrilaterals, circles, volumes, surface areas, spheres, cylinders, cones and other solids. Prereq: C or better in MTH060 or MTH062 or MTH067; or placement by assessment. (3 lec/0 lab) 3 sem hrs

## MTH 101 College Mathematics

This course in mathematics is designed to satisfy the general education requirement at the university level. The emphasis of the course is on understanding logical arguments, doing abstract thinking and solving verbal problems. Topics covered include logical statements and arguments, geometry in problem solving, estimation, approximation, judging reasonableness of answers, problem solving and statistics.
Note: A graphing calculator is strongly recommended for the course; a TI-83 is sufficient.
Prereq: C or better in MTH067 or MTH072, or placement by assessment.

IAI: M1 901.
(3 lec/O lab)
3 sem hrs

## MTH 102 Applied Practical Math

This course is designed to help students develop mathematical reasoning and real-world problem solving skills. Topics covered include applications of geometry, counting techniques and probability, statistics and graph theory.
Prereq: C or better in MTH067 or MTH072, or placement by assessment.
IAI: M1 904.
(3 lec/0 lab)

## 3 sem hrs

## MTH 103 Technical Mathematics

This course, intended primarily for those students majoring in the technical-vocational areas, includes an elementary review and survey of arithmetical operations, common fractions, fundamentals of algebra, mensuration formulas and geometry.
(3 lec/0 lab)
3 sem hrs

## MTH 104 Business Mathematics

Business Mathematics is a comprehensive introduction to the concepts and applications of mathematics to personal and commercial business problems. Basic arithmetic and problem solving techniques used in sales, marketing, banking, finance, accounting, consumer and other business situations are emphasized.
(3 lec/0 lab)
3 sem hrs

## MTH 107 Basic Statistics

This course in mathematics is designed to assist the student in the understanding and use of numerical data. Course content includes descriptive methods, probability, probability distributions, statistical inference, confidence intervals, tests of hypotheses, and correlation and regression.
Prereq: C or better in MTH067 or MTH072, or placement by assessment.
IAI: M1 902.
(3 lec/0 lab)
3 sem hrs

## MTH 109 Algebra for Business and Social Science

This course is designed to provide the Business, Nursing, Education, or other non-STEM student with basic algebraic concepts necessary to continue in non-STEM related mathematics courses. Topics include: real numbers, solutions of inequalities and equations, coordinate systems, functions, polynomials, rational functions, exponential and logarithmic functions, graphing and transformations of functions, and systems of equations. While there may be overlap with topics from Precalculus I, this course develops these topics in a non-rigorous manner and does not meet the prerequisite requirement for MTH131 Calculus With Analytic Geometry I.
Note: Students wishing to take Calculus With Analytic Geometry I (MTH131) should NOT register for this course. This course does not fulfill the mathematics requirement in some Associate degree programs. Please check with your counselor.
Prereq: C or better in MTH072 and MTH075; or placement by assessment.
(3 lec/0 lab)

## 3 sem hrs

## MTH 111 College Algebra

This course is designed to provide the student with basic algebraic concepts necessary to continue in other mathematics courses. Topics include: real numbers, complex numbers, solutions of inequalities and equations, coordinate systems, functions, polynomials, rational functions, exponential and logarithmic functions, graphing and transformations of functions, and systems of equations.
Note: This course does not fulfill the mathematics requirement in some Associate degree programs. Please check with your counselor.
Prereq: C or better in MTH070 or MTH072, and MTH075; or placement by assessment.
(4 lec/0 lab)
4 sem hrs

## MTH 112 Plane Trigonometry

This course in trigonometry of the plane concentrates on trigonometric functions and their applications. Topics covered include the trigonometric functions, solution of right triangles, radian measure, fundamental identities, angular measure, graphs, logarithms, functions of composite angles, oblique triangles, trigonometric equations, inverse trigonometric functions, and complex numbers, including powers and roots.
Note: This course does not fulfill the mathematics requirement in some Associate degree programs. Please check with your counselor.
Prereq: C or better in MTH070 or MTH072, and MTH075; or placement by assessment.
(3 lec/0 lab)
3 sem hrs

## MTH 129 Precalculus I

This course is designed to provide the STEM student with basic algebraic concepts needed to continue onto MTH131. Topics include: real numbers, complex numbers, solutions of inequalities and equations, coordinate systems, functions, polynomials, rational functions, graphing and transformations of functions, exponential and logarithmic functions, and systems of equations. While there may be overlap with topics from College Algebra, this course develops these topics in a rigorous manner and should not be considered equivalent to Algebra for Business and Social Science (MTH109).
Note: Students wishing to take Calculus for Business and Social Science (MTH211) should NOT register for this course. This course does not fulfill the mathematics requirement in some Associate degree programs. Please check with your counselor.
Prereq: C or better in MTH072 and MTH075; or placement by assessment.
(3 lec/0 lab)
3 sem hrs

## MTH 130 Precalculus II

This course in trigonometry of the plane concentrates on trigonometric, exponential, and logarithmic functions and their applications. Topics covered include the trigonometric functions, solution of right triangles, radian measure, fundamental identities, angular measure, graphs, logarithms, functions of composite angles, oblique triangles, trigonometric equations, inverse trigonometric functions, and complex numbers (including powers and roots).
Note: This course does not fulfill the mathematics requirement in some Associate degree programs. Please check with your counselor.
Prereq: C or better in MTH072 and MTH075; or placement by assessment.
(3 lec/0 lab)
3 sem hrs

## MTH 131 Calculus With Analytic Geometry I

This first course in calculus and analytic geometry covers limits and continuity, the definition of the derivative, rate of change, and slope, derivatives of polynomial, rational, trigonometric, exponential, and logarithmic functions, the chain rule, implicit differentiation, approximation by differentials, L'Hopital's Rule, higher order derivatives, Rolle's Theorem, the Mean Value Theorem, applications of derivatives, an introduction to antiderivatives and definite integrals, areas and the Fundamental Theorem of Calculus. Prereq: C or better in MTH111 and MTH112; or C or better in MTH129 and MTH130; or C or better in MTH130 and required placement score; or placement by assessment.
IAI: M1 900-1, MTH 901.
(4 lec/0 lab)
4 sem hrs

## MTH 132 Calculus With Analytic Geometry II

This second course in calculus and analytic geometry is a continuation of MTH 131. Topics covered include formal integration techniques, numerical integration, area between two curves, volumes of revolution, average value of a function, work, center of mass, improper integrals, arc length, surfaces of revolution, polar coordinates, slopes in polar coordinates, areas in polar coordinates, parametric equations, calculus with parametric equations, sequences, series, the integral test, alternating series, comparison tests, absolute convergence, ratio and root tests, power series, calculus with power series, Taylor series, and Taylor's Theorem.
Prereq: C or better in MTH131.
IAI: M1 900-2, MTH 902.
(4 lec/0 lab)
4 sem hrs

## MTH 201 Mathematics for Elementary Teachers I

This first course in mathematics for elementary education majors follows the curriculum standards of the National Council of Teachers of Mathematics. Topics include: problemsolving strategies, patterns and sequences, set theory, numeration systems, number theory, and operations with whole numbers, integers, rational numbers, and real numbers. Emphasis is on math content and manipulatives used to teach mathematics in grades K-8.
Prereq: C or better in MTH070 or MTH072 and MTH075; or placement by assessment.
(3 lec/0 lab)
3 sem hrs

## MTH 202 Mathematics for Elementary Teachers II

This second course in mathematics for elementary education majors follows the curriculum standards of the National Council of Teachers of Mathematics. Topics include: probability, statistics, geometry, and measurement. Emphasis is on math content and manipulatives used to teach mathematics in grades K-8.
Prereq: C or better in MTH201.
IAI: M1 903.
(3 lec/0 lab)
3 sem hrs

## MTH 210 Finite Mathematics

This course is intended for students in business, economics, or social and life sciences with applications from these fields. Topics covered include vectors, determinants, matrices, systems of inequalities, linear programming, simplex method, sets and counting, probability theory, stochastic processes, Markov processes, difference equations, and the mathematics of finance.
Prereq: C or better in MTH109 or MTH111 or placement by assessment.
IAI: M1 906.
(3 lec/0 lab)
3 sem hrs

Course Descriptions
Mathematics

## MTH 211 Calculus for Business and Social Science

This course presents an elementary treatment of topics from differential and integral calculus. It is intended primarily for students in the fields of business and social science. The emphasis is on skill-building and on applications of calculus to the areas of business, economics, and social science. The types of functions studied include polynomials, rational, exponential, and logarithmic. Multivariable content includes applications of partial derivatives.
Prereq: C or better in MTH109 or MTH111 or placement by assessment.
IAI: M1 900-B.
(4 lec/0 lab)
4 sem hrs

## MTH 233 Calculus With Analytic Geometry III

This third course in calculus and analytic geometry is a continuation of MTH132. Topics include vectors, vector-valued functions, space curves, multivariate functions, partial derivatives, differentials, directional derivatives, gradients, double and triple integrals, vector fields, line integrals, and differential equations. Prereq: C or better in MTH132.
IAI: M1 900-3, MTH 903.
(4 lec/0 lab)
4 sem hrs

## MTH 236 Introduction to Linear Algebra

This course covers basic concepts and techniques of matrix theory and linear algebra. It includes systems of linear equations, operations with matrices, inverses, determinants, vector spaces, inner product spaces, linear transformations, eigenvalues and eigenvectors. Numerical iterative methods are discussed and formal proof constructions are stressed.
Prereq: C or better in MTH233.
IAI: MTH 911.
(4 lec/0 lab)
4 sem hrs

## MTH 240 Differential Equations

This course covers linear equations of the first order linear equations with constant coefficients; the general linear equations; variation of parameters; undetermined coefficients; linear independence; the Wronskian; exact equations; separation of variables; applications; solutions of Laplace transforms; solution by power series and partial differential equations.
Prereq: C or better in MTH233.
IAI: MTH 912.
(3 lec/0 lab) 3 sem hrs

## Medical Assistant (MLA)

## MLA 150 Basic Administrative Procedures for the Medical Assistant

A patient-centered approach is used in this course that introduces the student to administrative medical assisting competencies utilized in the health care setting. Students receive CPR and First Aid certification. Students are taught fundamental triage skills, techniques of patient instruction, and basic clerical duties such as maintaining patient records, scheduling appointments and procedures, processing telephone calls, and handling finances for a medical practice. Recommended Prereq: CIS110 and HIT105; or concurrent enrollment.

## (2.5 lec/1 lab) <br> 3 sem hrs

## MLA 171 Medical Assistant Clinical I

This course is designed to instruct the medical assistant student in the routine clinical procedures of the medical office. Students are taught OSHA regulations and the use of Standard Precautions in the medical office. Proficiency is obtained in taking vital signs, collecting patient information and documentation. The student is taught body positions for examinations, methods of examination and aseptic technique, and are introduced to venipuncture in order to assist the primary health care provider in the medical setting.
Prereq: Program admission; ability to read at the 10th grade level or higher and perform required math skills as determined by assessment testing; BIO260; HIT105 or HIT110. (1.5 lec/2 lab) 2.5 sem hrs

## MLA 172 Medical Assistant Clinical II

This course instructs the student in performing the more advanced and invasive procedures that are required of the medical assistant. The student is taught techniques of specimen collection, basic 12-lead electrocardiography (ECG), principles of medication administration, and the proper use and application of assistive devices. This course emphasizes reinforcing basic patient care instruction to encompass all phases of the life cycle and special patient needs.
Prereq: Program admission; MLA210.
(1.5 lec/2 lab)
2.5 sem hrs

## MLA 210 Laboratory Procedures for the Medical Assistant

This course introduces the student to basic techniques for performing routine laboratory tests done in the medical office. These include phlebotomy skills and the physical, chemical and microscopic examination of urine and blood, as well as understanding the implications of normal and abnormal results. The proper collection, handling and labeling of urine and blood specimens, agglutination and coagulation tests, and an introduction to microbiology are also covered. The student continues to observe all OSHA and bloodborne pathogen standards. Prereq: Program admission; MLA171.
(2 lec/2 lab)
3 sem hrs

## MLA 220 Pharmacology for the Medical Assistant

This course examines how drugs are processed and utilized in the body, and medication classification and administration. Therapeutic and adverse effects of drugs are considered. Patient education related to drug therapy is emphasized. A component of mathematics utilizing metric and apothecary systems to calculate the dosage of medications is included. Prereq: Program admission; HIT105 or HIT110; BIO260 or concurrent enrollment.
(2 lec/0 lab)
2 sem hrs

## MLA 230 Medical Law and Ethics

This course addresses medical ethics, moral principles, state health care provider practice acts, legal responsibilities, liability, HIPAA regulations and civic duties of the health care professional.
(1 lec/0 lab)
1 sem hrs

## MLA 298 Medical Assistant Externship

Combining academic credit with professional experience, this externship allows students to learn about, observe and work in the medical assistant field. It provides students with 160 hours of on-site experience in the role of medical assistant. Students are assigned to an area physician's office, clinic or outpatient facility to participate in both the administrative and clinical areas of the practice, and observe various health care personnel perform tasks and duties. The student does not receive remuneration or payment for this learning experience. Repeatable to a maximum of 4 semester hours on a space available basis; 2 semester hours may apply to the medical assistant certificate.
Prereq: Program admission; C or better in MLA courses and HIT130; recommendation of instructor.
(.5 lec/9.5 lab)

2 sem hrs

## Military Science (MSC)

See ROTC Transfer Option on page 15 of this catalog.

## MSC 101 Leadership and Personal Development

This course introduces Cadets to the personal challenges and competencies which are critical for effective leadership. Cadets learn how the personal development of life skills such as critical thinking, time management, goal setting, stress management, and comprehensive fitness relate to leadership, and the Army profession. The focus is on developing basic knowledge and comprehension of Army leadership dimensions while gaining a big picture of understanding the Reserve Officer's Training Corps (ROTC) program, its purpose in the Army, and its advantages for the student.
(1 lec/2 lab)
2 sem hrs

## MSC 102 Foundations in Leadership

This course introduces Cadets to the personal challenges and competencies which are critical for adaptive leadership. Cadets learn the basics of the communication process and the importance for leaders to develop the essential skills to effectively communicate in the Army. Students will examine the Army Profession and what it means to be a professional in the U.S. Army. The overall focus is on developing basic knowledge and comprehension of Army leadership while gaining a big picture of understanding the Reserve Officer's Training Corps (ROTC) program, its purpose in the Army, and its advantages for the student.
(1 lec/2 lab)
2 sem hrs

## MSC 201 Innovative Tactical Leadership

This course explores the dimensions of creative and innovative tactical leadership strategies and styles by examining team dynamics and two historical leadership theories that form the basis of the Army leadership framework. Aspects of personal motivation and team building are practiced by planning, executing, and assessing team exercises. The focus continues to build on developing knowledge of leadership attributes and core leader competencies through the understanding of Army rank, structure, and duties as well as broadening knowledge of land navigation and squad tactics. Case studies provide a tangible context for learning the Soldier's Creed and Warrior Ethos.

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\text { (1 lec/2 lab) } 2 \text { sem hrs }
$$

## MSC 202 Leadership in Changing Environments

This course examines the challenges of leading in complex contemporary operational environments. The cross-cultural dimensions of leadership in a constantly changing world are highlighted and applied to practical Army leadership tasks and situations. As students practice communication and team building skills, case studies offer insight into the importance and practice of teamwork and tactics in real world scenarios.
(1 lec/2 lab)
2 sem hrs

## Music (MUS)

## MUS 100 Music: The Art of Listening

This course enhances the student's understanding and enjoyment of music. By listening to a variety of music such as orchestral, jazz and folk, the student gains insight into the works of composers through periods of musical development. Music of other world cultures is also examined.
Note: This course is not recommended for music majors. Participation in this course may include field trips which require admission fees.
IAI: F1 900.

## (3 lec/0 lab)

3 sem hrs

## MUS 101 Musics of the World

This course provides an introduction to music in various parts of the world, with an emphasis on how music functions within each society. The music and cultures of South America, India, Southeast Asia and China are presented.
Note: Participation in this course may include field trips which require admission fees.
IAI: F1 903N.
(3 lec/0 lab)
3 sem hrs

## MUS 102 Music in America

This course is an overview of America's rich and diverse musical heritage from Colonial times to the present. Jazz, rock, folk and country, as well as music for the concert hall, stage and screen are explored.
Note: Participation in this course may include field trips which require admission fees.
IAI: F1 904.
(3 lec/0 lab)
3 sem hrs

## MUS 110 Careers in Music

This course presents a wide-ranging survey of the careers available in the field of music. Guest speakers who work in music publishing, recording, arts management, education, and performance provide students with insights into careers in the profession.
Note: It is recommended that music students enroll their first semester.
(2 lec/0 lab)
2 sem hrs

## MUS 120 Basic Elements of Music

This introductory course is designed to develop knowledge and understanding of the basic elements of music (sound, rhythm, form, etc.) through the application of these elements in creative work. Students with no prior background are introduced to notation, music reading, scales, chords, and the piano keyboard. Computer-assisted instruction of these elements is also included.
(3 lec/O lab) 3 sem hrs

## MUS 121 Theory of Music I

This course presents a study of the technical aspects of music, such as scales, chords, melody, harmony, and notation, and the musical results of their interrelationships. The student gains an understanding of compositional techniques through the analysis of music and individual creative projects. Keyboard skills and ear training are also included.
Note: Student's skill level will be assessed for appropriate course placement. Please contact the Music Department at (630) 466-7900, ext. 5785 before registering for this course. Recommended Prereq: MUS120.
(3 lec/2 lab) 4 sem hrs

## MUS 123 Theory of Music II

This course is a continuation of MUS121, including the application of seventh chords, modulation and compositional form.
Note: Student's skill level will be assessed for appropriate course placement.
Recommended Prereq: MUS120; MUS 121. Coreq: MUS124.
(3 lec/0 lab)
3 sem hrs

## MUS 124 Aural Skills II: Developing the Musical Ear

This course is a continuation of aural skills developed in MUS121. Aural identification of intervals, scales, and chord qualities are emphasized, and pitch and rhythm drills are featured to aid in the development of notation skills.
Note: Student's skill level will be assessed for appropriate course placement.
Recommended Prereq: MUS121.
Coreq: MUS123.
(1 lec/0 lab)
1 sem hrs

## MUS 150 Vocal Techniques: An Introduction to Singing

This course provides an introduction to the vocal techniques of singing: breathing, phrasing and interpretation. Music for the class is chosen from many styles, ranging from Broadway to art compositions.
(2 lec/0 lab)
2 sem hrs

## MUS 151 Class Instruction-Piano I

Conducted in the electronic piano lab, this course provides beginning instruction in piano for students with no previous background in music. Students learn music notation, chords and harmonization. Music study includes popular, folk and classical music for beginners.
Note: For noncredit course see MUS891 in the Community Education section of the noncredit schedule.
(2 lec/0 lab)
2 sem hrs

## MUS 154 Class Guitar I

This course provides beginning guitar instruction focusing on reading chords, chord symbols, musical notation, and playing chord progressions using a variety of guitars and guitar-playing styles.
Note: Guitar must be brought to the first
class. For noncredit course see MUS890 in the Community Education section of the noncredit schedule.
(2 lec/0 lab) 2 sem hrs

## MUS 160 Jazz Ensemble

This course focuses on the performance of jazz music composed for the standard 15-17 piece ensemble. Music of the swing, bebop and contemporary periods is performed. Repeatable to a maximum of 4 semester hours; 4 semester hours may apply to a degree or certificate.
Note: For noncredit course see MUS894 in the Community Education section of the noncredit schedule.
(0 lec/2 lab)

## 1 sem hrs

## MUS 161 Jazz Improvisation Combo

This course includes techniques for solo jazz improvisation in a small combo setting. Blues and modal scales, and standard chord progression are studied. Repeatable to a maximum of 4 semester hours; 4 semester hours may apply to a degree or certificate. (0 lec/2 lab)

1 sem hrs

## MUS 162 Rock Music Ensemble

This course, which is a study of the various styles and techniques of rock music from the 1950s to the present through a performance group, is open to all musicians - guitar, percussion, keyboards, horns, singers and any other instruments used in rock music performance. Repeatable to a maximum of four semester hours; four semester hours may apply to a degree or certificate.
Note: For noncredit course see MUS895 in the Community Education section of the noncredit schedule.
Recommended Prereq: Music background.
(0 lec/2 lab)
1 sem hrs

## MUS 164 Concert Band

This course is an instrumental ensemble in which students rehearse and perform chamber music, concert band, and adapted literature. Repeatable to a maximum of 4 semester hours; 4 semester hours may apply to a degree or certificate.
Note: For noncredit course see MUS896 in the Community Education section of the noncredit schedule.
Recommended Prereq: Music background. (0 lec/2 lab)

1 sem hrs

## MUS 166 Vocal Ensemble: Waubonsee Chorale

The Waubonsee Chorale is a vocal ensemble of approximately 30 male and female singers. The group explores the lively art of small ensemble singing through performances of selected music, such as madrigals, spirituals and other traditional choral music forms. It is open to all students and community residents. Repeatable to a maximum of 4 semester hours; 4 semester hours may apply to a degree or certificate.
Note: For noncredit course see MUS898 in the Community Education section of the noncredit schedule.
(0 lec/3 lab) 1 sem hrs

## MUS 167 Community Vocal Ensemble: Fox Valley Festival Chorus

The Fox Valley Festival Chorus, an ensemble of approximately 60 singers, performs a variety of vocal music from all periods of music literature. Performances are often in conjunction with orchestras or other instrumental groups. Repeatable to a maximum of 4 semester hours; 4 semester hours may apply to a degree or certificate.
Note: New students should contact Dr. Mark Lathan, (630) 466-7900 ext. 2501.
(0 lec/2 lab)
1 sem hrs

## MUS 168 Community Instrumental Ensemble: Fox Valley Concert Band

This performing ensemble is designed for students who have advanced level skills in wind and percussion performance. Band repertoire consists of traditional concert band literature from all periods of music history. Attendance at rehearsals and concerts is required and includes two hours per week in evening rehearsals along with several concert dates scheduled outside of regular class meeting times. Repeatable to a maximum of 4 semester hours; 4 semester hours may apply to a degree or certificate.
Note: New students should contact Dr. Mark Lathan, Assistant Professor, (630) 466-7900 ext. 2501. For more information about the band go to www.fvcb.org.
Prereq: Audition with the Fox Valley Concert band conductor is required.
(0 lec/2 lab)
1 sem hrs

## MUS 170 Electronic Music Ensemble

This performance ensemble utilizes
Waubonsee's recording studio facilities and equipment to develop and perform original compositions. Tape recorders, microphones, signal processors and computers are the "instruments" in this ensemble, and experimentation is encouraged. Repeatable to a maximum of 4 semester hours; 4 semester hours may apply to a degree or certificate. Recommended Prereq: Music background. (O lec/2 lab)

1 sem hrs

## MUS 171 Percussion Ensemble

In this performance ensemble of 20th century percussion music and world drumming, individual percussion instruments and techniques are discussed. Traditional and contemporary percussion notation are taught to enable the student to perform assigned parts. Mallet instruments (marimba, vibes, etc.) as well as pitched and nonpitched percussion instruments are used. Repeatable to a maximum of 4 semester hours; 4 semester hours may apply to a degree or certificate.
Note: For noncredit course see MUS892 in the Community Education section of the noncredit schedule.
Recommended Prereq: Music background.
(0 lec/2 lab)
1 sem hrs

## MUS 171 Percussion Ensemble

In this performance ensemble of 20th century percussion music and world drumming, individual percussion instruments and techniques are discussed. Traditional and contemporary percussion notation are taught to enable the student to perform assigned parts. Mallet instruments (marimba, vibes, etc.) as well as pitched and nonpitched percussion instruments are used. Repeatable to a maximum of 4 semester hours; 4 semester hours may apply to a degree or certificate.
Note: For noncredit course see MUS892 in the Community Education section of the noncredit schedule.
Recommended Prereq: Music background.
(0 lec/2 lab)
1 sem hrs

## MUS 172 Guitar Ensemble

This course is a guitar ensemble that covers classical to jazz, and various popular styles. Repeatable to a maximum of 4 semester hours; 4 semester hours may apply to a degree or certificate.
Note: For noncredit course see MUS887 in the Community Education section of the noncredit schedule.
(0 lec/2 lab)
1 sem hrs

## MUS 175 All College Steel Band

This entry-level steel pan ensemble performs Caribbean, Pop, Classical and other genres of music. Introduction to the history, construction, development and voices of the instruments, as well as, technique will be discussed. Repeatable to a maximum of 6 semester hours; 6 semester hours may apply to a degree or certificate.
Note: For noncredit course see MUS893 in the Community Education section of the noncredit schedule.
(1 lec/1 lab)
1.5 sem hrs

## MUS 176 Waubonsee Community College Performing Steel Band

This intermediate-level steel pan ensemble performs Caribbean, Pop, Classical and other genres of music. Students will take a more in-depth look at these genres and will be introduced to basic steel band arranging. Repeatable to a maximum of 6 semester hours; 6 semester hours may apply to a degree or certificate.
Note: Student's skill level will be assessed for appropriate course placement. Recommended Prereq: MUS175.
(1 lec/1 lab)

## 1.5 sem hrs

## MUS 180 Applied: Composition/ Arranging

This course provides private instruction in composition individually designed for each student's need. Students concentrate on compositional technique and creative projects commensurate with their current ability. Repeatable to a maximum of 4 semester hours; 4 semester hours may apply to a degree or certificate.
Note: Student's skill level will be assessed for appropriate course placement. A total of 8 contact hours are provided per semester. Cost per half-hour lesson is approximately \$16, which is covered by tuition and course fee. Contact Dr. Mark Lathan, Assistant Professor, (630) 466-7900, ext. 2501.
(1 lec/0 lab)

## 1 sem hrs

## MUS 181 Applied: Piano

This course provides private instruction in piano individually designed for each student's need. Students concentrate on technique and repertory commensurate with their current ability. Repeatable to a maximum of 4 semester hours; 4 semester hours may apply to a degree or certificate.
Note: A total of 8 contact hours are provided per semester. Cost per half-hour lesson is approximately $\$ 16$, which is covered by tuition and course fee. Contact Dr. Mark
Lathan, Assistant Professor, (630) 466-7900, ext. 2501.
Recommended Prereq: One year of piano study or MUS151 or MUS251.
(1 lec/0 lab)
1 sem hrs

## MUS 182 Applied: Voice

This course provides private instruction in voice individually designed for each student's need. Students concentrate on technique and repertory commensurate with their current ability. Repeatable to a maximum of 4 semester hours; 4 semester hours may apply to a degree or certificate.
Note: A total of 8 contact hours are provided per semester. Cost per half-hour lesson is approximately $\$ 16$, which is covered by tuition and course fee. Contact Dr. Mark Lathan, Assistant Professor, (630) 466-7900, ext. 2501.
Recommended Prereq: MUS150.
(1 lec/O lab) 1 sem hrs

## MUS 183 Applied: Woodwinds

This course provides private instruction in woodwinds individually designed for each student's need. Students concentrate on technique and repertory commensurate with their current ability. Repeatable to a maximum of 4 semester hours; 4 semester hours may apply to a degree or certificate.
Note: Student's skill level will be assessed for appropriate course placement. A total of 8 contact hours are provided per semester. Cost per half-hour lesson is approximately \$16, which is covered by tuition and course fee. Contact Dr. Mark Lathan, Assistant Professor, (630) 466-7900, ext. 2501.
(1 lec/0 lab)
1 sem hrs

## MUS 184 Applied: Brass

This course provides private instruction in brass individually designed for each student's need. Students concentrate on technique and repertory commensurate with their current ability. Repeatable to a maximum of 4 semester hours; 4 semester hours may apply to a degree or certificate.
Note: Student's skill level will be assessed for appropriate course placement. A total of 8 contact hours are provided per semester. Cost per half-hour lesson is approximately $\$ 16$, which is covered by tuition and course fee. Contact Dr. Mark Lathan, Assistant Professor, (630) 466-7900, ext. 2501.
(1 lec/0 lab) 1 sem hrs

## MUS 185 Applied: String Instruments

This course provides private instruction in string instruments individually designed for each student's need. Students concentrate on technique and repertory commensurate with their current ability. Repeatable to a maximum of 4 semester hours; 4 semester hours may apply to a degree or certificate.
Note: A total of 8 contact hours are provided per semester. Cost per half-hour lesson is approximately $\$ 16$, which is covered by tuition and course fee. Contact Dr. Mark Lathan, Assistant Professor, (630) 466-7900, ext. 2501.
Recommended Prereq: MUS154 or MUS254.
(1 lec/O lab)
1 sem hrs

## MUS 186 Applied: Organ

This course provides private instruction in organ that is individually designed for each student's need. Students concentrate on technique and repertory commensurate with their current ability. Repeatable to a maximum of 4 semester hours; 4 semester hours may apply to a degree or certificate.
Note: A total of 8 contact hours are provided per semester. Cost per half-hour lesson is approximately $\$ 16$, which is covered by tuition and course fee. Contact Dr. Mark Lathan, Assistant Professor, (630) 466-7900, ext. 2501.
(1 lec/O lab)
1 sem hrs

## MUS 187 Applied: Percussion

This course provides private instruction in percussion individually designed for each student's need. Students concentrate on technique and repertory commensurate with their current ability. Repeatable to a maximum of 4 semester hours; 4 semester hours may apply to a degree or certificate.
Note: Student's skill level will be assessed for appropriate course placement. A total of 8 contact hours are provided per semester. Cost per half-hour lesson is approximately \$16, which is covered by tuition and course fee. Contact Dr. Mark Lathan, Assistant Professor, (630) 466-7900, ext. 2501.

Recommended Prereq: One semester of percussion study.
(1 lec/0 lab)
1 sem hrs

## MUS 188 Applied: Audio Production

This course provides private instruction in audio production individually designed for each student's need. Students concentrate on audio recording and Musical Instrument Digital Interface(MIDI)projects commensurate with their current ability. Repeatable to a maximum of 4 semester hours; 4 semester hours may apply to a degree or certificate.
Note: Student's skill level will be assessed for appropriate course placement. A total of 8 contact hours are provided per semester. Cost per half-hour lesson is approximately \$16, which is covered by tuition and course fee. Contact Dr. Mark Lathan, Assistant Professor, (630) 466-7900, ext. 2501.

Recommended Prereq: MUS121. Prereq: MUS211; MUS213.
(1 lec/0 lab)
1 sem hrs

## MUS 200 Music Literature: A Historical Survey

This course contains an overview of the various historic music styles in the Western Tradition. Representative works are chosen for study which illustrate the styles and the principal components of those genres.
Recommended Prereq: MUS120 or MUS121.

## (3 lec/0 lab)

3 sem hrs

## MUS 211 Introduction to the Recording Studio

This course is designed as an introduction to the tools and techniques used in digital sound production and recording. Topics include digital recording and editing techniques, microphone techniques, audio mixing console operations, basic principles of acoustics and audio signal processing. Students have access to the recording studio for assigned projects. Recommended Prereq: Familiarity with basic functions of Mac OS.

## (3 lec/0 lab)

3 sem hrs

## MUS 213 Advanced Studio Recording

This course provides creative applications of the concepts and tools acquired in MUS211, including applications using Musical Instrument Digital Interface (MIDI), digital recording, editing, mixdown, sampling, looping software, ReWire and mastering.
Prereq: MUS211.
(3 lec/0 lab)
3 sem hrs

## MUS 215 Electronics for Audio Production

This course is an introduction to the analysis of circuits and electronics using resistors, capacitors, inductors, diodes and integrated components as they apply to electronics within the music industry.
Note: Knowledge of basic algebra is recommended.
(3 lec/0 lab)
3 sem hrs

## MUS 221 Theory of Music III

A continuation of MUS123, this course features observations of counterpoint, chromatic harmonies (borrowed chords, augmented sixth chords, and mediants) form and analysis techniques, and the application of compositional techniques.
Note: Student's skill level will be assessed for appropriate course placement.
Recommended Prereq: MUS123.
Coreq: MUS222.
(3 lec/0 lab)
3 sem hrs

## MUS 222 Aural Skills III: Developing the Musical Ear

This course is a continuation of MUS124, presenting a study of syncopated rhythmic patterns, intervals, and triads, isolated and in context. Singing of folk songs and selected art songs in treble and bass clefs, as well as ear training correlated with sight singing, are also included.
Note: Student's skill level will be assessed for appropriate course placement.
Recommended Prereq: MUS124.
Coreq: MUS221.
(1 lec/0 lab)
1 sem hrs

## MUS 223 Theory of Music IV

This course is a continuation of MUS221, covering 20th and early 21st century techniques. The study of polychords, synthetic scales, new instrumental and notational systems, twelve-tone composition, and influences of non-Western music are included. Note: Student's skill level will be assessed for appropriate course placement. Recommended Prereq: MUS221. Coreq: MUS224.
(3 lec/0 lab)
3 sem hrs

## MUS 224 Aural Skills IV: Developing the Musical Ear

This course is a continuation of MUS222 with a focus on the study of advanced rhythmic patterns, continued use of triads, and chords of the seventh and altered chords, isolated and in context. Sight singing of more advanced materials and ear training correlated with sight singing are also covered.
Note: Student's skill level will be assessed for appropriate course placement.
Recommended Prereq: MUS222.
Coreq: MUS223.
(1 lec/0 lab)
1 sem hrs

## MUS 251 Class Instruction-Piano II

Continuing the skills taught in MUS151, this course emphasizes more advanced materials in music notation, chords and harmonization. A minimum of 4 hours of practice per week is required.
Note: Student's skill level will be assessed for appropriate course placement.
Recommended Prereq: MUS151.
(2 lec/0 lab)
2 sem hrs

## MUS $\mathbf{2 5 2}$ Class Instruction-Piano III

This course provides group piano instruction with an emphasis on developing advanced harmonization techniques, such as extended chords, transposition and accompanying techniques. A survey of appropriate piano literature is also included.
Note: Student's skill level will be assessed for appropriate course placement.
Recommended Prereq: MUS251.
(2 lec/0 lab)
2 sem hrs

## MUS 254 Class Guitar II

This course provides intermediate level instruction in guitar and includes chord formation with bar chords, finger picking, accompaniment patterns, and seventh chords.
Note: Guitar must be brought to the first class.
Recommended Prereq: MUS154 or equivalent.
(2 lec/0 lab)
2 sem hrs

## MUS 266 Chamber Choir

Chamber Choir is an auditioned choral group intended to offer expanded vocal music opportunities. Class sessions consist mainly of auditions, sight-reading and rehearsal of material to prepare a repertoire for performances. Emphasis is placed on musicianship skills such as reading, effective ensemble technique and interpretation of various chamber (small group) musical styles, such as the Renaissance Madrigal, motets, part songs, and contemporary chamber music. Repeatable to a maximum of 4 semester hours; 4 semester hours may apply to a degree or certificate.
Note: Contact Dr. Mark Lathan, Assistant Professor, at (630) 466-7900, ext. 2501, for audition information. Students must audition by Friday of week 2 and register by Friday of week 3.
Coreq: MUS166.
(O lec/2 lab)
1 sem hrs

## MUS 280 Applied: <br> Composition/Arranging

This course provides private instruction in composition that is individually designed for each student's need. Students concentrate on compositional techniques and creative projects commensurate with their current ability.
Repeatable to a maximum of 8 semester hours; 8 semester hours may apply to a degree or certificate.
Note: Student's skill level will be assessed for appropriate course placement. A total of 16 contact hours are provided per semester. Cost per hour lesson is approximately \$33, which is covered by tuition and course fee. Contact Dr. Mark Lathan, Assistant Professor, (630) 466-7900, ext. 2501.
Recommended Prereq: MUS121.

## (2 lec/0 lab)

## 2 sem hrs

## MUS 281 Applied: Piano

This course provides private instruction in piano individually designed for each student's need. Students concentrate on technique and repertory commensurate with their current ability. Repeatable to a maximum of 8 semester hours; 8 semester hours may apply to a degree or certificate.
Note: Student's skill level will be assessed for appropriate course placement. A total of 16 contact hours are provided per semester. Cost per hour lesson is approximately \$33, which is covered by tuition and course fee. Contact Dr. Mark Lathan, Assistant Professor, (630) 466-7900, ext. 2501.
Recommended Prereq: One year of piano study.
(2 lec/0 lab)
2 sem hrs

## MUS 282 Applied: Voice

This course provides private instruction in voice individually designed for each student's need. Students concentrate on technique and repertory commensurate with their current ability. Repeatable to a maximum of 8 semester hours; 8 semester hours may apply to a degree or certificate.
Note: Student's skill level will be assessed for appropriate course placement. A total of 16 contact hours are provided per semester. Cost per hour lesson is approximately \$33, which is covered by tuition and course fee. Contact Dr. Mark Lathan, Assistant Professor, (630) 466-7900, ext. 2501.
Recommended Prereq: MUS150.
(2 lec/0 lab)
2 sem hrs

## MUS 283 Applied: Woodwinds

This course provides private instruction in woodwinds individually designed for each student's need. Students concentrate on technique and repertory commensurate with their current ability. Repeatable to a maximum of 8 semester hours; 8 semester hours may apply to a degree or certificate.
Note: Student's skill level will be assessed for appropriate course placement. A total of 16 contact hours are provided per semester. Cost per hour lesson is approximately \$33, which is covered by tuition and course fee. Contact Dr. Mark Lathan, Assistant Professor, (630) 466-7900, ext. 2501. .
(2 lec/0 lab)
2 sem hrs

## MUS 284 Applied: Brass

This course provides private instruction in brass individually designed for each student's need. Students concentrate on technique and repertory commensurate with their current ability. Repeatable to a maximum of 8 semester hours; 8 semester hours may apply to a degree or certificate.
Note: Student's skill level will be assessed for appropriate course placement. A total of 16 contact hours are provided per semester. Cost per hour lesson is approximately \$33, which is covered by tuition and course fee. Contact Dr. Mark Lathan, Assistant Professor, (630) 466-7900, ext. 2501.
(2 lec/0 lab)
2 sem hrs

## MUS 285 Applied: String Instruments

This course provides private instruction in string instruments individually designed for each student's need. Students concentrate on technique and repertory commensurate with their current ability. Repeatable to a maximum of 8 semester hours; 8 semester hours may apply to a degree or certificate.
Note: Student's skill level will be assessed for appropriate course placement. A total of 16 contact hours are provided per semester. Cost per hour lesson is approximately \$33, which is covered by tuition and course fee. Contact Dr. Mark Lathan, Assistant Professor, (630) 466-7900, ext. 2501.
Recommended Prereq: MUS154 or MUS254.
(2 lec/0 lab) 2 sem hrs

## MUS 286 Applied: Organ

This course provides private instruction in organ individually designed for each student's need. Students concentrate on technique and repertory commensurate with their current ability. Repeatable to a maximum of 8 semester hours; 8 semester hours may apply to a degree or certificate.
Note: Student's skill level will be assessed for appropriate course placement. A total of 16 contact hours are provided per semester. Cost per hour lesson is approximately \$33, which is covered by tuition and course fee. Contact Dr. Mark Lathan, Assistant Professor, (630) 466-7900, ext. 2501.
(2 lec/0 lab)
2 sem hrs

## MUS 287 Applied: Percussion

This course provides private instruction in percussion individually designed for each student's need. Students concentrate on technique and repertory commensurate with their current ability. Repeatable to a maximum of 8 semester hours; 8 semester hours may apply to a degree or certificate.
Note: Student's skill level will be assessed for appropriate course placement. A total of 16 contact hours are provided per semester. Cost per hour lesson is approximately $\$ 33$, which is covered by tuition and course fee. Contact Dr. Mark Lathan, Assistant Professor, (630) 466-7900, ext. 2501.
Recommended Prereq: One semester of percussion study.
(2 lec/0 lab)
2 sem hrs

## MUS 288 Applied: Audio Production

This course provides private instruction in audio production individually designed for each student's need. Students concentrate on audio recording and Musical Instrument Digital Interface (MIDI) projects commensurate with their current ability. Repeatable to a maximum of 8 semester hours; 8 semester hours may apply to a degree or certificate.
Note: Student's skill level will be assessed for appropriate course placement. A total of 16 contact hours are provided per semester. Cost per hour lesson is approximately $\$ 33$, which is covered by tuition and course fee. Contact Dr. Mark Lathan, Assistant Professor, (630) 466-7900, ext. 2501.
Recommended Prereq: MUS121. Prereq:
MUS211; MUS213.
(2 lec/0 lab)
2 sem hrs

## MUS 296 Special Topics/Music

This course offers in-depth exploration of a special topic, issue or trend in the field of music. Repeatable to a maximum of 12 semester hours for different special topics; 6 semester hours may apply to a degree or certificate.
(0 to 3 lec/0 to 6 lab)
1 to 3 sem hrs

Course Descriptions

## Nurse Assistant (NAS)

## NAS 101 Basic Nurse Assistant Training

This course, approved by the Illinois Department of Public Health, is designed to prepare persons to function in the role of nurse assistant in a variety of health care settings. Content includes basic nursing procedures, food service, body mechanics, safety measures, special treatments, communication skills, and care of persons with Alzheimers disease and related dementias. Clinical experiences are provided in long-term care facilities.
Note: Due to state attendance requirements, students must register by the first day of class. Included in the fees are: \$4 for a WCC student name badge. Students must complete CNA testing in Learning Assessment and Testing Services for appropriate advising and/ or placement into the course. In addition, students must provide evidence of a 2-step test for tuberculosis (TB) prior to the first clinical day. A valid social security number is required at the time of enrollment.
Prereq: Program admission; reading assessment; 16 years of age or older.
(4 lec/6 lab)
7 sem hrs

## Nursing (NUR)

## NUR 100 How to Succeed in Nursing

This course is designed to help students transition from prerequisite courses to nursing courses. Emphasis is placed on options in nursing, what to expect in nursing, study skills, how to take nursing tests, and survival. This course should help the success of students in the nursing program. Repeatable to a maximum of 4 semester hours; 1 semester hour may apply to a degree or certificate.
Recommended Prereq: Completion of most nursing program prerequisite courses.
(1 lec/0 lab)
1 sem hrs

## NUR 105 Introduction to Professional Nursing

This course is designed to provide the student with concepts of professional nursing upon which all subsequent nursing courses are built. It focuses on cognitive, psychomotor and communication skills that are basic to client care and that can be utilized by the professional nurse or delegated to assistive personnel. Students achieve mastery of these skills through classroom instruction, laboratory demonstration, peer review and clinical practice in a geriatric setting. Special consideration is given to concepts of geriatric nursing. Laboratory proficiency testing is emphasized.
Note: Clinical may be scheduled early mornings, afternoons or evenings and is dependent on the clinical site. Clinical sites and times will be given after the first class meeting.
Prereq: Program admission; C or better in all of the following: PSY100, PSY205, BIO250, BIO270, BIO272, ENG101, ENG102, COM100; current American Heart Association Basic Life Support for Health Care Providers (CPR).
Coreq: NUR106.
(3 lec/6 lab) 5 sem hrs

## NUR 106 Introduction to Clinical Pharmacology for Nurses

This course is designed for nursing students beginning the study of pharmacology and medication administration. It introduces the thinking process for the safe administration of medication. A comprehensive unit on medication calculations is included. Instructional methods to facilitate the simulated application of content to nursing practice are utilized.
Prereq: Program admission.
Coreq: NUR105; or NUR120 (for advanced placement students).
(1 lec/O lab)
1 sem hrs

## NUR 120 Basic Concepts of Nursing

This course continues with basic nursing skills. Use of the nursing process including nursing assessment, basic concepts of pharmacology, therapeutic communication, and fluid and electrolyte balance with a focus on diabetes mellitus are emphasized. Clinical experiences are provided in an acute care facility.
Note: Advanced placement in NUR120 may
require concurrent enrollment in NUR106 based on recommendation of the program director. Clinical may be scheduled early mornings, afternoons or evenings and is dependent on the clinical site. Clinical sites and times will be given at the first class meeting.
Prereq: Program admission; $C$ or better in NUR105; nursing math proficiency test. Coreq: American Heart Association Health Care Provider course; documentation of current immunizations.
(3 lec/6 lab)
5 sem hrs

## NUR 150 Concepts of Nursing I

This course focuses on the use of the nursing process to meet the needs of patients experiencing stress, respiratory or gastrointestinal conditions, or surgery. Pediatric and geriatric concepts are integrated. Clinical experiences are provided in an acute care facility including the operating and recovery rooms.
Note: Clinical may be scheduled early mornings, afternoons or evenings and is dependent on the clinical site. Clinical sites and times will be given at the first class meeting.
Prereq: Program admission; C or better in NUR120.
Coreq: Current American Heart Association Basic Life Support for Health Care Providers (CPR).
(3 lec/6 lab)
5 sem hrs

## NUR 160 Pharmacology

This course examines how drugs are processed and utilized in the body. A client's reactions to a drug both therapeutically and adversely are considered. Potential drug interactions are explored. Client education related to drug therapy is emphasized.
Recommended Prereq: BIO270 and BIO272; or BIO260.
(2 lec/0 lab)
2 sem hrs

## NUR 175 Concepts of Mental Health Nursing

This course focuses on adapting the nursing process to the practice of psychiatric-mental health nursing. The learning experience is eclectic and holistic, and explores biological, intellectual, emotional, spiritual and sociocultural dimensions of behavior. The student builds on previously learned skills, especially the therapeutic use of self, while working with other professionals in a multidisciplinary approach within a therapeutic environment. Historical perspectives, psychiatric disorders, psychiatric nursing concepts, nursing interventions, therapies, and community roles and services are stressed. Clinical experiences are provided in a psychiatric facility.
Note: Clinical may be scheduled early mornings, afternoons or evenings and is dependent on the clinical site. Clinical sites and times will be given at the first class meeting.
Prereq: Program admission; C or better in NUR150.
Coreq: Current American Heart Association Basic Life Support for Health Care Providers (CPR).
(3 lec/6 lab)
5 sem hrs

## NUR 205 Concepts of Nursing II

This course is concerned with the individual who is seriously ill. It focuses on the nursing care of persons with genitourinary, hematological, immunological or oncological disorders. It has a special focus on care of persons receiving complex parenteral therapies. Emphasis is placed on assessment, establishing priorities of care, and the organization and utilization of the nursing care plan. Clinical experiences are provided on general medicalsurgical units with an emphasis on oncology and renal care.
Note: Clinical may be scheduled early mornings, afternoons or evenings and is dependent on the clinical site. Clinical sites and times will be given at the first class meeting.
Prereq: Program admission; $C$ or better in NUR175.
Coreq: Current American Heart Association Basic Life Support for Health Care Providers (CPR).
(3 lec/6 lab) 5 sem hrs

## NUR 220 Nursing Concepts of the Childbearing Family

This course focuses on the nursing care of the childbearing family. The normal and complicated pregnancy and the care of the mother and neonate are studied. Women's health and growth and development of the well child and family are discussed. Clinical experiences are designed to develop the student's assessment, teaching, and nursing skills that promote optimum health and wellbeing for the childbearing family. Clinical experiences are provided in both acute care and community based settings.
Note: Clinical may be scheduled early mornings, afternoons or evenings and is dependent on the clinical site. Clinical sites and times will be given at the first class meeting.
Prereq: Program admission; C or better in NUR205.
Coreq: Current American Heart Association Basic Life Support for Health Care Providers (CPR).
(3 lec/6 lab) 5 sem hrs

## NUR 250 Concepts of Nursing III

This course is concerned with the adult patient who is seriously ill, including those with endocrine disorders, cardiac disorders, peripheral vascular disorders, acute surgeries and patients requiring intensive care. Emphasis is on assessment, establishing priorities of care, and organization and utilization of the nursing care plan. Pediatric and geriatric concepts are integrated. Clinical experience is provided on the intermediate and/or intensive care units.
Note: Clinical may be scheduled early mornings, afternoons or evenings and is dependent on the clinical site. Clinical sites and times will be given at the first class meeting.
Prereq: Program admission; C or better in NUR220.
Coreq: Current American Heart Association Basic Life Support for Health Care Providers (CPR).
(3 lec/6 lab)
5 sem hrs

## NUR 275 Advanced Concepts of Nursing

This course is designed to assist the student in the transition to the role of graduate nurse. The course focuses on the use of the nursing process in caring for groups of patients. Content includes conditions of the eye and ear, orthopedic, neurologic and emergency nursing, care of the burn patient and other conditions of the integumentary system. Ethical, legal, political and social issues affecting health care are also explored. Clinical experience is provided in a variety of settings.
Note: Clinical may be scheduled early mornings, afternoons or evenings and is dependent on the clinical site. Clinical sites and times will be given at the first class meeting.
Prereq: Program admission; C or better in NUR250.
Coreq: Current American Heart Association Basic Life Support for Health Care Providers (CPR).
(2 lec/8 lab)
5 sem hrs

## Patient

## Care Technician (PCT)

## PCT 200 Patient Care Technician

This course is designed to prepare students to function in the role of a patient care technician (PCT) in an acute care setting. Content includes: advanced nursing assistant skills, dietary procedures, respiratory therapy techniques, basic phlebotomy skills and basic cardiac monitoring set-up and techniques. Prereq: Consent of instructor; NAS101 or equivalent.
Recommended Coreq: COM125; HIT105.
(2 lec/2 lab)
3 sem hrs

## PCT 297 Patient Care

## Technician Externship

Combining academic credit with professional experience, this externship allows students to learn about, observe and work in the patient care technician field. It provides the student with 80 hours of hands-on experience in an acute care setting where the student performs the skills required of a patient care technician (PCT).
Prereq: Consent of instructor; $C$ or better in PCT200; HIT105 or concurrent enrollment; COM125 or concurrent enrollment; American Heart Association Basic Life Support for Health Care Providers; physical examination; proof of current immunizations; completion of two-step tuberculosis skin test; drug screen.
(. 5 lec/5 lab)
1.5 sem hrs

## Philosophy (PHL)

## PHL 100 Introduction to Philosophy

This course provides an overview of the major fields of philosophy including metaphysics, epistemology, logic and ethics. Fundamental questions may include: What is the meaning of life? Does God exist? Are we free? What can we know? What makes a good argument? How should we live?
IAI: H4 900.
(3 lec/0 lab)
3 sem hrs

## PHL 101 Introduction to Logic

This course focuses on the nature of logical inference including both formal and informal reasoning and deductive versus inductive lines of thought. Topics include: 1) the use of symbolic languages to make evident the logical essentials of language and meaning, 2) the essentials of both good and bad arguments, fallacious and non-fallacious reasoning, 3) formal and informal inferences, and 4) the essentials of proof and evidence. This is done through translating ordinary language sentences into their truth-functional form and evaluating the validity of arguments through such things as truth tables and truth trees.
IAI: H4 906.
(3 lec/0 lab)
3 sem hrs

Course Descriptions
Philosophy

## PHL 105 Introduction to Ethics

A study of the principal ethical theories and concepts of human conduct and character, as well as a critical evaluation of these theories and concepts as they apply to particular moral issues and decisions. Students study ethical theories such as ethical egoism, utilitarianism, Kantianism, virtue ethics, Divine Command Theory, and moral relativism, and consider how these views apply to moral issues related to such topics as suicide, sex and marriage, war, terrorism, legal punishment, animal rights, the environment, and other current moral problems.

## IAI: H4 904.

(3 lec/0 lab)
3 sem hrs

## PHL 107 Introduction to Medical Ethics

This course examines a selection of problems in biomedical ethics, alongside the philosophical issues they raise. A case based approach will be taken while discussing issues such as the responsibility of healthcare workers to their patients, truthfulness, confidentiality, informed consent, human research, abortion, euthanasia, death and dying, genetic choices, cloning, stem cell research, organ transplantation, and the allocation of health care resources.
(3 lec/0 lab) 3 sem hrs

## PHL 110 Introduction to Critical Thinking

This course focuses on the practical value of critical thinking in a variety of personal, professional and social situations. Students study such things as the structure of arguments, the critical analysis and evaluation of arguments, inductive and deductive reasoning, formal and informal logical fallacies, problem solving and decision-making, and rhetorical strategies. Specific topics may include critically analyzing advertisements, political speech, debate techniques, gender stereotypes, human psychology, journalistic reporting, criminal investigations, etc.
IAI: H4 906.
(3 lec/0 lab)
3 sem hrs

## PHL 120 Introduction to World Religions

This course gives a philosophical introduction to the comparative study of the major world religions including Hinduism, Buddhism, Confucianism, Taoism, Judaism, Christianity, and Islam.
IAI: H5 904N.
(3 lec/0 lab)
3 sem hrs

## PHL 140 Philosophy of Art

This course examines philosophical issues and theories related to the creation, display, and evaluation of works of art, focusing primarily, but not exclusively, on the tradition of Western art. Emphasis is placed on, but not limited to, the visual arts. Additionally, issues related to defining art, distinguishing good from bad art, forgery, expertise, the art market, authentic performances, etc. are included.

## (3 lec/0 lab) <br> 3 sem hrs

## PHL 201 History of Philosophy I

This course introduces students to the Western Tradition of philosophical thinking, beginning with its origins in ancient Greece and ending with the developments in Medieval Philosophy. Emphasis is placed on an analysis and understanding of each significant period of philosophical development, the connection among philosophical theories and their historical developments, and their influence on each other.

## IAI: H4 901.

(3 lec/0 lab)
3 sem hrs

## PHL 202 History of Philosophy II

This course introduces students to the Western tradition of philosophical thinking, beginning with developments during Early Modernity and ending with 20th century and contemporary philosophy. Emphasis is placed on an analysis and understanding of each significant period of philosophical development, the connections among philosophical theories, their historical developments, and their influence upon each other.
IAI: H4 902.
(3 lec/0 lab)
3 sem hrs

## PHL 296 Special Topics for Philosophy

The course offers in-depth exploration of a special topic, issue or trend in the field of philosophy. Repeatable to a maximum of 12 semester hours for different special topics; 6 semester hours may apply to a degree or certificate.
(1 to 3 lec/0 lab)
1 to 3 sem hrs

## Phlebotomy (PBT)

## PBT 105 Theoretical and Clinical Aspects of Phlebotomy

This course prepares the student for the role of phlebotomy technician. Instruction in human structure and function of the peripheral vascular and circulatory systems, specimen collection, specimen processing and handling, and laboratory operations is included. The student is also taught legal and ethical issues related to phlebotomy and specimen collection, infection control and OSHA requirements.
Note: Each student is required to carry a personal health insurance policy. Proof of insurance is due by the fourth week of an 8-week PBT105 Theoretical and Clinical Aspects of Phlebotomy class, or by the seventh week of a 16-week PBT105 Theoretical and Clinical Aspects of Phlebotomy class.
Prereq: Reading assessment.
Recommended Coreq: COM125; HIT105 or HIT110.
(3.5 lec/2 lab)
4.5 sem hrs

## PBT 297 Phlebotomy Externship

Combining academic credit with professional experience, this externship allows students to learn about, observe and work in the phlebotomy field. It provides the student with 120 hours of hands-on experience provided at a site within the community. The student is afforded an opportunity to perform a minimum of 100 successful venipunctures and 25 successful skin punctures, per certification requirements. Repeatable to a maximum of 3 semester hours on a space-available basis; 1.5 semester hours may apply to the phlebotomy certificate.
Prereq: Reading assessment; $C$ or better in PBT105; COM125 or concurrent enrollment; HIT105 or HIT110 or concurrent enrollment; American Heart Association Basic Life
Support for Health Care Providers; physical examination; completion of two-step tuberculosis test; proof of current immunization status.
(.5 lec/7.5 lab)
1.5 sem hrs

## Physical Education (PED)

## PED 108 Horsemanship I

Intended for the beginning or inexperienced rider, Horsemanship I covers English riding (Saddleseat), grooming, leading, saddling, and bridling.
Note: Students must have shoes (no slip-ons) with hard soles and low heels for riding, long pants, riding or bike helmet, tee shirts or sweatshirts (no tank tops). Maximum weight limit: 160 lbs , per stable requirements.
For noncredit course see REC892 in the Community Education section of the noncredit schedule.
(0 lec/1 lab)
.5 sem hrs

## PED 109 Horsemanship II

Horsemanship II provides a more in-depth continuation of skills learned in Horsemanship I. Riders work on diagonals, simple figure work, and horse psychology. Repeatable to a maximum of 1.5 semester hours; a maximum of 4 semester hours of PED activity courses may apply to a degree or certificate.
Note: Maximum weight limit: 160 lbs., per stable requirements. For noncredit course see REC893 in the Community Education section of the noncredit schedule.
Prereq: Consent of instructor.
(0 lec/1 lab)
.5 sem hrs

## PED 110 Soccer

Structured for the experienced soccer player, this course covers the formation, fundamentals and strategies of competitive soccer, as well as the rules and procedures of play. Repeatable to a maximum of 4 semester hours; a maximum of 4 semester hours of PED activity courses may apply to a degree or certificate.

## (O lec/2 lab)

## 1 sem hrs

## PED 111 Volleyball

This course, designed for the experienced player, covers formations and fundamentals of power volleyball. Repeatable to a maximum of 4 semester hours; a maximum of 4 semester hours of PED activity courses may apply to a degree or certificate.
Recommended Prereq: Volleyball experience.
(0 lec/2 lab)
1 sem hrs

## PED 113 Baseball I

This course is designed for the intermediate baseball player. Fundamentals of hitting, fielding and pitching are covered. Game strategies are taught with students participating in actual game situations. Repeatable to a maximum of 4 semester hours; a maximum of 4 semester hours of PED activity courses may apply to a degree or certificate.
(0 lec/2 lab)
1 sem hrs

## PED 114 Basketball I

This course is designed for the intermediate basketball player. Instruction includes the techniques of shooting, passing, dribbling and rebounding, which are practiced in actual game situations. Repeatable to a maximum of 4 semester hours; a maximum of 4 semester hours of PED activity courses may apply to a degree or certificate.
Recommended Prereq: Varsity playing experience.
(0 lec/2 lab)
1 sem hrs

## PED 115 Softball I

This course is designed for the student with intermediate softball experience. Techniques of fielding, hitting, pitching and base running are used in actual game situations. Repeatable to a maximum of 4 semester hours; a maximum of 4 semester hours of PED activity courses may apply to a degree or certificate.
(0 lec/2 lab)
1 sem hrs

## PED 116 Karate

Self-defense, competition, ceremonial techniques and costume dress are covered in this course designed for the beginning student of karate. Students also practice punching and blocking. Repeatable to a maximum of 4 semester hours; a maximum of 4 semester hours of PED activity courses may apply to a degree or certificate.
(0 lec/2 lab)
1 sem hrs

## PED 118 Personal Defense

This course is designed to help students acquire confidence and the ability to cope with unexpected attacks and emergencies. Self-defense techniques, including methods of preventing attacks, breaking falls and basic throws, are taught. Repeatable to a maximum of 4 semester hours; a maximum of 4 semester hours of PED activity courses may apply to a degree or certificate.
Note: For noncredit course see REC890 in the Community Education section of the noncredit schedule.
(0 lec/2 lab)
1 sem hrs

## PED 120 Baseball II

This course is designed for the experienced collegiate baseball player. Advanced techniques of hitting, fielding and pitching are covered. Game strategies are taught with students participating in actual game situations. Repeatable to a maximum of 4 semester hours; a maximum of 4 semester hours of PED activity courses may apply to a degree or certificate. Recommended Prereq: PED113.
(0 lec/2 lab)
1 sem hrs

## PED 124 Basketball II

This course is designed for the experienced collegiate basketball player. Advanced techniques of shooting, passing, dribbling and rebounding are taught and practiced in actual games situations. Repeatable to a maximum of 4 semester hours; a maximum of 4 semester hours of PED activity courses may apply to a degree or certificate.
Recommended Prereq: PED114.
(0 lec/2 lab)
1 sem hrs

## PED 125 Softball II

This course is designed for the experienced collegiate softball player. Instruction includes advanced techniques of fielding, hitting, pitching and base running used in actual game situations. Repeatable to a maximum of 4 semester hours; a maximum of 4 semester hours of PED activity courses may apply to a degree or certificate.
Recommended Prereq: PED115.
(O lec/2 lab)
1 sem hrs

## PED 127 Cardio Kickboxing

Cardio Kickboxing is a fusion of boxing, martial arts, and aerobics done rhythmically to music. It is a cardiovascular workout consisting of jabs, hooks, uppercuts, and kicks designed to get you on your way to a leaner body and healthier state of mind. This is a non-contact course and gloves are not required.
(0 lec/2 lab)
1 sem hrs

## PED 128 Spinning

Spinning uses stationary bicycles to develop and improve cardiovascular endurance, muscular strength and overall wellness. Music is used to inspire, energize and establish the pace and rhythm of the workout. Repeatable to a maximum of 4 semester hours; a maximum of 4 semester hours of PED activity courses may apply to a degree or certificate.
(0 lec/2 lab) 1 sem hrs

## PED 134 Zumba Fitness

This course improves an individual's cardiovascular system through participation in aerobic exercise routines set to Latin-infused dance music. The routines feature interval training sessions where fast and slow rhythms and resistance training are combined. Intensity is elevated to a level appropriate to one's training heart rate. Repeatable to a maximum of 4 semester hours; a maximum of 4 semester hours of PED activity courses may apply to a degree or certificate.
Note: For noncredit course see FIT827 in the Community Education section of the noncredit schedule.
(0 lec/2 lab)
1 sem hrs

Course Descriptions
Physical Education

## PED 136 Physical Fitness I

This course is designed for the student desiring to reach and maintain optimal levels of fitness. Cardiovascular endurance and muscular strength are emphasized through work on weight resistance and cardiovascular equipment.
Note: PED136 is designed for first-time fitness center students. During the first week of classes, students are required to attend one orientation session at their scheduled class time. Returning students should register for PED140, PED145 or PED148.
(0 lec/2 lab)
1 sem hrs

## PED 140 Physical Fitness II

Designed for the student desiring to reach and maintain optimal levels of fitness, this course emphasizes the development of cardiovascular endurance and muscular strength through work on weight resistance and cardiovascular equipment.
Note: Repeatable to a maximum of 4 semester
hours; a maximum of 4 semester hours of
PED activity courses may apply to a degree or certificate.
Prereq: PED136.
(0 lec/2 lab)
1 sem hrs

## PED 141 Jogging

Designed for the student desiring to improve or maintain cardiovascular fitness, this course combines theory and practice to gain maximum short- and long-term cardiovascular benefits. Repeatable to a maximum of 4 semester hours; a maximum of 4 semester hours of PED activity courses may apply to a degree or certificate.
(0 lec/2 lab)
1 sem hrs

## PED 142 Weight Training

This course is designed for either the beginning or experienced weight trainer. The course covers muscle and strength development and includes lifts, body building and Olympic lifts. Repeatable to a maximum of 4 semester hours; a maximum of 4 semester hours of PED activity courses may apply to a degree or certificate.
Note: Students have use of the fitness center. (0 lec/2 lab)

1 sem hrs

## PED 145 Fitness Training

In this course students learn the factors involved in increasing and decreasing body weight. An exercise program is designed to control body weight and/or to shape contours of the body by using both free weights and machines.
Note: Repeatable to a maximum of 4 semester hours; a maximum of 4 semester hours of PED activity courses may apply to a degree or certificate.
Prereq: PED136.
(0 lec/2 lab)
1 sem hrs

## PED 146 Yoga

Designed as an introduction to Hatha Yoga, this course focuses on the union of mind, body and breath through asana practice complemented by relaxation and meditation. The techniques shown enhance muscular strength, flexibility, energy, concentration and relaxation.
Repeatable to a maximum of 4 semester hours; a maximum of 4 semester hours of PED activity courses may apply to a degree or certificate.
Note: For noncredit course see MNB899 in the Community Education section of the noncredit schedule.
(0 lec/2 lab) 1 sem hrs

## PED 147 Intermediate Yoga

This course is designed for students who are looking to deepen their knowledge of yoga through the practices of Asana, Pranayama and Meditation. At the intermediate level, more challenging postures are included. Increasing the duration that these postures are held further develops greater flexibility, strength and relaxation. Repeatable to a maximum of 4 semester hours; a maximum of 4 semester hours of PED activity courses may apply to a degree or certificate
Note: This practice is ideally suited for students who have had some previous Yoga experience. For noncredit course see FIT893 in the Community Education section of the noncredit schedule.
Recommended Prereq: PED146.
(0 lec/2 lab)
1 sem hrs

## PED 148 Conditioning

This course is designed as a conditioning program for the student desiring to reach and maintain optimal fitness levels. It meets individual fitness needs while emphasizing the development of muscular strength and endurance, flexibility, and cardiovascular endurance. Students receive pre- and progress fitness tests.
Note: Repeatable to a maximum of 4 semester hours; a maximum of 4 semester hours of PED activity courses may apply to a degree or certificate.
Prereq: PED136.
(O lec/2 lab)
1 sem hrs

## PED 150 Basic Prevention and Care of Athletic Injuries

This course is an introduction to the field of athletic training for students planning careers in athletic training, coaching, physical education, or a fitness profession. The course will provide students with the knowledge and skills necessary for the proper care and management of athletic injuries. Additionally, students will learn how to establish an effective health care system, prevent and minimize sports-related injuries, recognize and manage specific areas and conditions, and apply their skills and knowledge in a variety of settings.

## PED 200 Introduction to Physical Education

This course is designed to introduce the disciplines of physical education, recreation, and sport. Emphasis will be placed on the historical background and philosophies relating to physical education, the future direction of physical education, and traditional and new career opportunities. Emphasis is placed on physical education as a profession.
(3 lec/0 lab)
3 sem hrs

## PED 203 Current Issues in Sports

This course examines the interaction between sport and culture, the relevance of sport in modern society, and the social processes which influence sport.
(3 lec/0 lab)
3 sem hrs

## PED 204 Introduction to Coaching

This introduction to the major aspects of athletic coaching includes: developing a philosophy, different coaching and player personalities, motivation, discipline, communication, self-confidence, team cohesion, outside influences, leadership styles, and cultural and minority issues.
(3 lec/0 lab)
3 sem hrs

## PED 205 Scientific Foundations of Human Movement

This course introduces the student to the different aspects of physical activity which include biological, mechanical, physiological, kinesiological, psychological, and sociological aspects. Also included is the development of skills required to assess physiological measures.
(3 lec/0 lab)
3 sem hrs

## PED 207 Teaching Sport Skills I: Team Sports

This course provides instruction on skill development, performance, and analysis of team sports such as: basketball, football, soccer, softball, and volleyball.
(2 lec/0 lab)
2 sem hrs

## PED 208 Teaching Sport Skills II: Individual Sports

This course provides instruction on skill development, performance, and analysis of individual sports such as: badminton, golf, tennis, and track and field.
(2 lec/0 lab)
2 sem hrs

## PED 209 Introduction to Exercise Science and Sports Professions

This course provides an overview of the foundational content within the areas of exercise science as well as options available for professional career opportunities, career development, and employment. Topics include: historical development of exercise science, exercise physiology, athletic training, sport nutrition, sport psychology, biomechanics, and careers in exercise science.
(3 lec/ lab)
3 sem hrs

## PED 210 Physical Education for Children

This course examines the management and instruction of developmentally appropriate physical education for children. Topics include: growth and development, curriculum design, teaching techniques, motor skill development, and evaluation.
(3 lec/0 lab)
3 sem hrs

## PED 211 First Aid and Emergency Care

This course provides consistent guidelines and training which enable the citizen responder to recognize and respond appropriately to cardiac, breathing and first aid emergencies. Upon successful completion of the course, participants may receive the American Red Cross Responding to Emergencies, CPR/AED and First Aid certificates.

## (3 lec/0 lab)

3 sem hrs

## PED 231 Theory and Practice of Basketball

This course covers the techniques for developing competitive basketball skills. Included are the study of basketball rules, strategy and instruction methods for coaching basketball.
(2 lec/0 lab)
2 sem hrs

## PED 232 Theory and Practice of Baseball

This course includes a study of the techniques involved in developing competitive baseball skills. Topics include rules, strategy and instruction methods.
(2 lec/0 lab)
2 sem hrs

## PED 234 Group Exercise Instruction

This course is designed to prepare exercise specialists with the knowledge and skills needed to teach the methods and concepts of group exercise instruction. Theoretical learning and practical application techniques are emphasized throughout the course.

$$
\text { (2 lec/0 lab) } \quad 2 \text { sem hrs }
$$

## PED 235 Survey of the Sports Organization

This course surveys sports administration and sports business techniques as they pertain to the sport enterprise. Students attain theoretical knowledge and practical skills in preparation for various sport managerial and business careers. Also covered are decision making and planning from the sport manager's perspective and the impact of corporate sponsorship on the sport. (3 lec/0 lab)

3 sem hrs

## PED 236 Exercise for Special Populations

This course is designed to prepare exercise specialists to adapt physical education and exercise so that individuals with predisposed conditions can successfully participate in activity and exercise programs. Predisposed conditions include obesity, diabetes, coronary artery disease, hypoglycemia, stroke, peripheral vascular disease, osteoporosis and hypertension.
Recommended Prereq: BIO260; or BIO270 and BIO272.
(3 lec/0 lab)
3 sem hrs

## PED 237 Strength and Conditioning Principles

This course is designed to prepare exercise specialists to adapt the principles of resistance training to individuals in order to develop and maintain muscular strength, muscular endurance and muscle mass.
Recommended Prereq: BIO260; or BIO270 and BIO272.
(3 lec/0 lab)
3 sem hrs

## PED 238 Fitness Assessment and Exercise Programming

This course is designed to prepare exercise specialists with the knowledge and skills needed to assess health status and health behaviors in order to create and update exercise prescriptions. Emphasis is placed on the exercise specialist obtaining as much information as possible about a participant to optimize the benefit-to-risk ratio.
Recommended Prereq: BIO260; or BIO270 and BIO272.
(3 lec/0 lab)
3 sem hrs

## PED 239 Exercise and Sport Nutrition

This course covers the essentials of human nutrition and examines the metabolic and physiologic basis for macro-nutrient and micronutrient recommendations during training, competition/performance, and recovery. Other topics include: body composition and weight management, effect of eating disorders in athletes, and sport nutrition supplements. (3 lec/ lab) 3 sem hrs

## PED 240 Business Management for the Fitness Professional

This course provides an overview of the entrepreneurial process and covers the practical aspects of operating a fitness business. Topics include: business plan development, sales, marketing, service, operations, administration, management, legalities, and human resources. (3 lec/0 lab)

3 sem hrs

## PED 242 Lifestyle Wellness Coaching

This course provides an understanding of coaching processes developed to support and motivate individuals in the areas of health, wellness, fitness, and sport. Topics include: effective coaching, models of change, ethics, relationships, communication, and motivation.
(2 lec/0 lab)
2 sem hrs

## Physics (PHY)

## PHY 103 Concepts of Physics

This survey course of the principles of physics concentrates on the analysis of physical phenomena encountered in everyday experience. It talks about fundamentals of physics from a conceptual viewpoint rather than mathematical. Topics covered include: mechanics, properties of matter, heat, sound, electricity and magnetism, light and relativity.
Note: Students enrolling in PHY103 are not required to enroll in PHY104 (lab). However, those students needing a four semester-hour lab science for transfer purposes may wish to concurrently enroll in PHY103 and PHY104.

IAI: P1 900.
(3 lec/0 lab)

## 3 sem hrs

## PHY 104 Concepts of Physics Laboratory

This laboratory course is designed to provide further opportunity for students to observe first-hand many of the physical phenomena described in PHY 103, Concepts of Physics, and to demonstrate and reinforce the concepts and principles developed in that course.
Recommended Coreq: PHY103.
IAI: P1 900L.
(O lec/2 lab)
1 sem hrs

## PHY 111 Introduction to Physics I

This is the first course of a two-semester sequence covering algebra and trigonometrybased physics. It is a study of principles and phenomenon of classical mechanics including physical laws governing motion, force, work, energy, momentum, rotation, fluid dynamics and wave motion and thermal physics.
Prereq: C or better in MTH112 or MTH130 or placement determined by assessment.

IAI: P1 900L.
(3 lec/3 lab)
4 sem hrs

## PHY 112 Introduction to Physics II

This course is the second course of a twosemester sequence. It includes algebra and trigonometry-based studies of electrostatics, electric fields, currents, magnetic forces and fields, geometric and physical optics, and modern physics.
Prereq: PHY111.
(3 lec/3 lab)
4 sem hrs

## PHY 221 General Physics I

This is the first course in a three course sequence in the Calculus-based study of physical laws governing motion, force, work, energy, momentum, rotation, oscillations and waves and fluid dynamics. This course is ordinarily required for students pursuing degrees in engineering, physics, chemistry and mathematics.
Prereq: MTH131 or concurrent enrollment.
IAI: P2 900L.
(4 lec/3 lab)
5 sem hrs

## PHY 222 General Physics II

This course is the second part of a threesemester sequence in the Calculus-based study of the physical laws governing electricity and magnetism, and geometric and physical optics. This course is ordinarily required for students pursuing degrees in engineering, physics, chemistry and mathematics.
Prereq: MTH132 or concurrent enrollment; C or better in PHY221.
(4 lec/3 lab)
5 sem hrs

## PHY 223 General Physics III

This Calculus-based course follows the General Physics I and II sequence. Students will study thermal physics, special relativity, introductory quantum mechanics, nuclear physics, and particle physics. This course is ordinarily required for students pursuing degrees in engineering, physics, chemistry and mathematics.
Prereq: MTH240 or concurrent enrollment. C or better in PHY222.
(3 lec/3 lab)
4 sem hrs

## Political Science (PSC)

## PSC 100 Introduction to American Government

This course provides an introduction to the structure and operation of American national political institutions and the American political process, including such topics as the principles of democracy U.S. and Illinois Constitutions; the election process; and executive, legislative and judicial processes.
IAI: S5 900.
(3 lec/0 lab)
3 sem hrs

## PSC 220 Comparative Government

This course compares the political systems of selected Western and non-Western countries. Common governmental problems, the causes of political instability and revolution and techniques of political analysis are explained.
IAI: S5 905.
(3 lec/0 lab)
3 sem hrs

## PSC 240 State and Local Government

Examining the powers, structures, functions and contemporary problems of state and local governments, this course emphasizes Illinois politics and governmental affairs, as well as local governments in the Chicago metropolitan area.
IAI: S5 902.
(3 lec/0 lab)
3 sem hrs

## PSC 260 Introduction to International Relations

International Relations introduces students to the basic theories, concepts, knowledge and people of international relations. The course provides consideration of the determinanats of international relations as well as an analysis of contemporary problems in world politics, examining causes of conflict and potential solutions.
IAI: S5 904.
(3 lec/0 lab)
3 sem hrs

## PSC 280 Introduction to Political Philosophy

This course offers a survey of the major political philosophers and concepts in the history of political thought, focusing on classical and modern theorists and emphasizing such concepts as justice, equality, power, liberty and rights.
IAI: PLS 913.
(3 lec/0 lab)
3 sem hrs

## PSC 296 Special Topics/ Political Science

This course offers in-depth exploration of a special topic, issue or trend in the field of political science. Repeatable to a maximum of 12 semester hours for different special topics; 6 semester hours may apply to a degree or certificate.
Note: No topics may be offered more than twice in three years.
(. 5 to 3 lec/0 lab) . 5 to 3 sem hrs

## Psychology (PSY)

See also Educational Psychology (EDU 210).

## PSY 100 Introduction to Psychology

This course provides a survey of the study of human and animal behavior, emphasizing the scientific methods of contemporary psychological investigation. Topics include an introduction to the biological basis of behavior, sensation and perception, learning, memory, cognition, motivation, emotion, life-span development of behavior, personality, abnormal behavior, social behavior and individual differences.

IAI: S6 900.
(3 lec/0 lab)
3 sem hrs

## PSY 200 Research and Methodology in Psychology

This course provides comprehensive coverage of the basic principles of research methodology in psychology. The following topics are covered: basic statistical analysis, research design, ethical behavior in designing and collecting data, and interpreting and reporting psychological research. Students have the opportunity to collect, interpret and report their own psychological research.
Recommended Prereq: PSY100.
(3 lec/0 lab)
3 sem hrs

## PSY 205 Life-Span Psychology

This course provides an introduction to current theory and research on the physiological, cognitive, personality and social development of individuals from conception through childhood, adolescence, young adulthood, middle adulthood, and older adulthood. Normal development is emphasized; however, special human circumstances are also explored. Recommended Prereq: PSY100 or consent of instructor.
IAI: S6 902.
(3 lec/0 lab)
3 sem hrs

## PSY 215 Adulthood and Aging

This course provides an integration of the theory and research regarding the developmental processes across the adult lifespan. Topics focus on the changes that occur from early adulthood through the last stages of life including: career choice and development; mate selection and marriage; conventional and non-conventional families; theories of adult personality development; mid and latelife transitions; aging; and dying, death and bereavement.
Recommended Prereq: PSY100 or consent of instructor.

IAI: S6 905.
(3 lec/0 lab)
3 sem hrs

## PSY 220 Child Psychology

This course introduces the student to the theories and current research on the physical, cognitive, socio-emotional and personality development of the child from the point of conception through childhood.
Recommended Prereq: PSY100 or consent of instructor.

IAI: S6 903.
(3 lec/0 lab)
3 sem hrs

## PSY 226 Adolescent Psychology

This course provides an introduction to the development of adolescents, emphasizing the physical and physiological changes and the social and cognitive development that occur during adolescence. Topics include changing relationships with family and peers, identity and value development, sexuality, school experiences and career goals, and adolescent problems and delinquency.
Recommended Prereq: PSY100 or consent of instructor.
IAI: S6 904.
(3 lec/0 lab)
3 sem hrs

## PSY 235 Social Psychology

This course provides an examination of the theory and research relating to the social factors that influence individual and group behavior. Attitudes, social perception, social cognition, the establishment of norms, conformity, leadership, group dynamics and research methods are examined, with an emphasis on their effects on the individual.
Recommended Prereq: PSY100 or consent of instructor.
IAI: S8 900.
(3 lec/0 lab)
3 sem hrs

## PSY 240 Abnormal Psychology

This course presents the body of scientific knowledge in the field of abnormal psychology with emphasis on theoretical explanations, experimental data, assessment and diagnostic procedures, treatment modalities, and the prevention of abnormal behavior.
Recommended Prereq: PSY100.

## IAI: PSY 905.

(3 lec/0 lab)
3 sem hrs

## PSY 245 Industrial/ Organizational Psychology

This course introduces students to the psychological methods and theories that apply to organizational problems. Emphasis is on promoting human welfare for individuals in organizational settings.
Recommended Prereq: PSY100 or consent of instructor.
(3 lec/0 lab)
3 sem hrs

## PSY 250 Theories of Personality

This course explores how human behavior can be understood through the scientific study of individual differences. Topics include: research methods, assessment techniques, theoretical approaches in personality, and current topics and research in personality.
Recommended Prereq: PSY100 or consent of instructor.
(3 lec/0 lab)
3 sem hrs

## PSY 296 Special Topics in Psychology

This course offers in-depth exploration of a special topic, issue or trend in the field of psychology. Repeatable to a maximum of 12 semester hours for different special topics; 6 semester hours may apply to a degree or certificate.
(1 to 3 lec/0 lab)
1 to 3 sem hrs

## Reading (RDG)

NOTE: Placement in reading courses is determined by scores on required assessment tests.

## RDG 050 Academic Reading I

This course builds core reading skills necessary for college success and promotes active reading habits. It introduces reading comprehension strategies, vocabulary development, and critical reading and thinking development.

## (3 lec/0 lab) <br> 3 sem hrs

## RDG 070 Academic Reading II

This course prepares students to read academic texts in the content areas, to build academic vocabulary, and to critically think and study at the college level. Emphasis is placed on applying critical reading skills to narrative and expository texts. Upon completion, students should be able to comprehend, analyze, and evaluate college texts.
Prereq: C or better in RDG050 or placement by assessment.
(3 lec/0 lab)
3 sem hrs

## Real Estate (REL)

## REL 100 Real Estate Broker Pre-License

Required to take for the Illinois Real Estate Broker Licensing Exam, this course introduces real estate principles including agency, career options, client and customer relationships, contracts, employment agreements, financing, local, state and federal laws, real property, marketing, market analysis, and property valuation.
(5 lec/0 lab)
5 sem hrs

## REL 105 Real Estate Broker PreLicense: Applied Principles

Required to take the Illinois Real Estate Broker Licensing Exam, this interactive course applies the real estate concepts introduced in REL100 to the practice of real estate agency through the use of case and situational studies, demonstration of common real estate activities, and role play.
Prereq: REL100.
(1 lec/ lab)
1 sem hrs

## REL 200 Real Estate Managing Broker Pre-License

Required to take Illinois' Real Estate Managing Broker Licensing Exam, this course focuses on broker management topics such as company policies and procedures, disclosure, dispute resolution, escrow, licensing, operations, recruiting, supervision, and other industry issues.
Note: Real estate license required. Recommended Prereq: Illinois Real Estate Broker License.
(2 lec/0 lab)
2 sem hrs

## REL 205 Real Estate Managing Broker Pre-License: Applied Management and Supervision

Required to take Illinois' Real Estate Managing Broker Licensing Exam, this interactive course applies principles from REL200 to the management of real estate brokerage activities through the use of case and situational studies, and role play.
Note: Real estate license required. Recommended Prereq: REL200; Illinois Real Estate Broker License
(1 lec/0 lab) 1 sem hrs

## REL 260 Residential Real Estate Investing

This course, designed to look at both long and short-term investment strategies, provides an introduction to real estate investment with an emphasis on residential property. Topics include real estate economics, investment principles, distressed properties, and taxation. This course does not fulfill any licensing requirements.
(3 lec/0 lab)
3 sem hrs

## Religious Studies (RLG)

## RLG 120 Introduction to World Religions

This course gives a philosophical introduction to the comparative study of the major world religions including Hinduism, Buddhism, Confucianism, Taoism, Judaism, Christianity, and Islam.

IAI: H5 904N.
(3 lec/0 lab)
3 sem hrs

## RLG 220 Judaism and the Old Testament

This course introduces texts and ideas of the Old Testament in their contextual setting. Students examine the primary text and historical events in early Judaism, the religious and political ideas of the Ancient Near East and the social geography of the region.
IAI: H5 901.
(3 lec/0 lab)
3 sem hrs

## RLG 230 Christianity and the New Testament

This course introduces students to the texts and ideas of the New Testament in their contextual setting. Students examine the primary text and historical events in the period leading to the emergence of the ministry of John the Baptist and Jesus of Nazareth, the religious and political ideas of the Roman Empire as they relate to the Middle East, the ideas of first century Judaism, the ideas of early Christianity and the social geography of the region.
IAI: H5 901.
(3 lec/0 lab)
3 sem hrs

## RLG 240 Islam and the Our'an

This course introduces students to the texts and ideas of the Qur'an in their contextual setting. The students examine the primary text and historical events in the period leading to the emergence of the Prophet Muhammad and early Islam, the religious and political ideas of the Arabian Peninsula, the relationship between the Qur'an and the Old Testament, the relationship between early Islam and institutional Christianity and the social geography of the region.
IAI: H5 901.
(3 lec/0 lab)
3 sem hrs

## Sign Language (SGN)

See also Interpreter Training (ITP).

## SGN 101 American Sign Language I

This course is an introduction to American Sign Language (ASL). The course explores ASL sign vocabulary and grammatical structures and also serves as a basic introduction to Deaf Culture. (3 lec/0 lab)

3 sem hrs

## SGN 102 American Sign Language II

This course is designed to provide students with skills necessary to communicate in American Sign Language (ASL) at an advanced level. Grammatical structures and cultural principles are emphasized. Students build both receptive and expressive skills.
Prereq: C or better in SGN101.
(3 lec/0 lab)
3 sem hrs

## SGN 104 Signs in Everyday Use

This course is designed to assist students in expanding their conversational skills in American Sign Language. The course introduces several unique numbering systems and non-manual modifiers as well as advanced fingerspelling and mime techniques. Prereq: C or better in SGN101 and SGN105, or concurrent enrollment.
(3 lec/0 lab) 3 sem hrs

## SGN 105 Linguistics of ASL I

This course is designed to introduce students to advanced vocabulary and linguistics of American Sign Language (ASL). The course addresses the development of conversational fluency in American Sign Language. Students are introduced to a series of vernacular signs, which can be used in a variety of contexts. Emphasis is placed on both expressive and receptive competence.
Prereq: C or better in SGN101 or concurrent enrollment.
(3 lec/O lab) 3 sem hrs

## SGN 106 Linguistics of ASL II

This course addresses the conversational fluency in American Sign Language (ASL). Focus is on the development of fluency with more advanced sign vocabulary and more complex ASL linguistics. Students are introduced to a series of thematically related signs that can be used in a variety of contexts. Emphasis is placed on both expressive and receptive competence.
Prereq: C or better in SGN101, SGN104, and SGN105.
Recommended Coreq: SGN108, if interested in the ITP program.
(3 lec/O lab) 3 sem hrs

## SGN 108 Conceptually Accurate Signed English

This course provides students with the opportunity to communicate using English syntax with ASL signs and grammatical features. Students receive expanded sign vocabulary, extensive practice with comparative translations, and an introduction to simultaneous voice to sign transliterating. Prereq: C or better in SGN101, SGN104, and SGN105; C or better in SGN102 and SGN106, or concurrent enrollment.

## (3 lec/O lab)

3 sem hrs

## SGN 110 Introduction to American Deaf Culture

This course introduces students to American Deaf Culture. The course includes a description of the specific cultural values, norms and traditions as well as criteria for membership. It explores the experiences of deaf individuals throughout the life span.
Prereq: SGN101 or concurrent enrollment.
(3 lec/0 lab)
3 sem hrs

## Social Science (SSC)

## SSC 110 Cultures and Peoples of Mexico

Focusing on the prehistory and contemporary peoples of Mexico, this course employs interdisciplinary social science methods to examine the racial and ethnic background, past cultures, cultural structures, social structure, political structure and economics of Mexico. The impact of industrialization and urbanization is explored as well as current problems in Mexico.

## (2 lec/3 lab) <br> 3 sem hrs

## SSC 296 Special Topics for Social Science

This course offers in-depth exploration of a special topic, issue or trend in the social sciences field. Repeatable to a maximum of 12 semester hours for different special topics; 6 semester hours may apply to a degree or certificate.
(. 5 to 3 lec/0 lab) .5 to 3 sem hrs

## Sociology (SOC)

See also Social Psychology (PSY 235).

## SOC 100 Introduction to Sociology

Introduction to Sociology includes the study of the major theories and concepts of sociology. Analyses of culture and social structure, socialization and the principles of individual and group interactions, deviance, and social inequalities are addressed. Topics discussed are poverty and social stratification, race, gender and sexualities. Social forces and social movements on population and environment are examined.

## IAI: S7 900.

(3 lec/0 lab)
3 sem hrs

## SOC 120 Racial and Ethnic Relations

Racial and Ethnic Relations analyzes the theoretical explanations of prejudice, discrimination and stratification on racial, religious, and ethnic groups in American society. This course examines the persistence of group identity, impact of group conflict, changes in majority-minority group relations and current trends in racial identity. Government policy and related social problems are discussed.

## IAI: S7 903D.

(3 lec/0 lab)
3 sem hrs

## SOC 130 Sociology of Family

Sociology of Family is the study of the institution of family and the theoretical context of family patterns within society. The impact of changing American demographics and culture on the structure of family in society is emphasized, and the areas of economy, social class, aging, and crises are examined in the social context of family. Sociological study of family focuses on socialization, gender roles, pair bonding and sexuality, marriage, divorce and remarriage, and parenting and childhood.

## IAI: S7 902.

(3 lec/0 lab)
3 sem hrs

## SOC 210 Social Problems

This course offers an introductory survey of the major social problems that are exhibited within contemporary American society. The focus is on the behavior, causes, prevention and/or treatment of such social problems as poverty, crime, drug abuse and addiction, marital conflicts and child rearing, mental illness, racism and sexism.
IAI: S7 901.
(3 lec/0 lab)
3 sem hrs

## SOC 230 Sociology of Sex and Gender

Sociology of Sex and Gender examines the multifaceted complexities between sex and gender using sociological theories. Social construction of gender and its impact on individuals in environments and groups are explored. The gendered individual and social consequences on changing social definitions in family, work, intimate relationships, education, economy, health, communication and violence are discussed.
IAI: S7 904D.
(3 lec/0 lab)
3 sem hrs

## SOC 240 Sociology of Deviance

Sociology of Deviance examines the sociological study of the causes and control of social deviance and deviant behavior. Emphasis is placed on the major sociological theories of deviance. Special attention is given to individual and group deviance within the context of social deviance. Topics discussed are physical violence, family violence, sexual deviance, self targeted deviance, medicalization of deviance, internet crime, substance use and abuse, and privileged and underprivileged deviance. Stigma of deviant identity among specific groups is analyzed.
(3 lec/0 lab)

## 3 sem hrs

## SOC 296 Special Topics in Sociology

This course offers in-depth exploration of a special topic, issue or trend in the sociology field. Repeatable to a maximum of 12 semester hours for different special topics; 6 semester hours may apply to a degree or certificate. Note: No topics may be offered more than twice in three years.
(1 to 3 lec/0 lab)
1 to 3 sem hrs

## Spanish (SPN)

See also Health Care Interpreting (HCI).

## SPN 101 Elementary Spanish I

This course emphasizes the four basic skills (listening, speaking, reading and writing) essential to a communicative approach to language learning. Students learn to interact effectively in a variety of situations, and to interact and communicate with people of Spanish-speaking culture groups in a way that exhibits an understanding of the culture's conventions.
(3 lec/0 lab)
3 sem hrs

## SPN 102 Elementary Spanish II

This continuation of SPN101 is designed to provide students with continued growth and specialization in the four essential skills (listening, speaking, reading and writing). This course continues to teach students to interact and communicate with people of Spanishspeaking culture groups in a way that shows an understanding of the culture's conventions. Recommended Prereq: SPN101 or one year of high school Spanish or its equivalent. (3 lec/0 lab)

3 sem hrs

## SPN 110 Survival Spanish I

This is a beginning-level course designed for those who wish to communicate with Spanishspeaking people on a regular basis. Emphasis is on vocabulary and grammar rules that are of value when listening to, speaking, reading and writing basic Spanish.
(3 lec/0 lab)
3 sem hrs

## SPN 201 Intermediate Spanish I

This course reviews the language content of the first year of study. It introduces intermediate skills and provides the student with ample practice in interactive conversation, with a special emphasis on the development of oral proficiency and creative composition. Furthermore, it promotes a greater understanding of the Hispanic cultures through the study and discussion of contemporary Spanish and Hispanic American readings. Recommended Prereq: SPN102 or two years of high school Spanish or its equivalent.
(3 lec/0 lab)
3 sem hrs

Course Descriptions
Spanish

## SPN 202 Intermediate Spanish II

Intermediate Spanish II is designed to provide students with extensive practice in conversation, composition and reading with emphasis on spontaneous language production. It promotes an even greater understanding of the Hispanic cultures through the study and enjoyment of some contemporary Spanish and Hispanic American literature and art. Students communicate both orally and in writing on a variety of selected topics, allowing them to expand and practice their vocabulary, grammatical usage and idiomatic language at a higher level.
Recommended Prereq: SPN201 or three years of high school Spanish or its equivalent.

IAI: H1 900.
(3 lec/0 lab)
3 sem hrs

## SPN 205 Spanish for Native Speakers

This course introduces native/near native heritage learners to elements of history, authentic literature, culture and writing in order for them to become more proficient in their heritage, culture and language. Students explore the nuances of Spanish in formal and informal contexts that use standard or nonstandard grammar and vocabulary, with emphasis on reading, writing and vocabulary building. Recommended Prereq: Native or near-native fluency in Spanish.
IAI: H1 900.
(3 lec/0 lab)
3 sem hrs

## SPN 211 Conversational Spanish

This course provides intermediate-level students with intensive practice in structured and spontaneous conversation in Spanish. Emphasis is on helping the student to become more fluent in responding to spoken Spanish and in initiating conversations with Spanish speakers. Students also learn how to handle vocabulary deficits. Vocabulary targets student needs.
Recommended Prereq: SPN102 or SPN111 or two years of high school Spanish.
(3 lec/O lab)
3 sem hrs

## SPN 215 Introduction to Hispanic Literature

Introduction to Hispanic Literature introduces students to selected masterpieces by Hispanic writers from a variety of periods. This course focuses on the further development of the four areas of language learning (reading, speaking, listening, and culture) through readings and class discussion, with an emphasis on written language skills.
Recommended Prereq: SPN202 or near native speaker.

## IAI: H3 916.

(3 lec/0 lab)
3 sem hrs

## SPN 296 Special Topics in Spanish

This course offers in-depth exploration of a special topic, issue or trend as it relates to the Spanish language. Repeatable to a maximum of 12 semester hours for different special topics; 6 semester hours may apply to a degree or certificate.
(1 to 3 lec/0 lab)
1 to 3 sem hrs

## Surgical Technology (SUR)

## SUR 100 Principles of Surgical Technology

This course provides an overview of the surgical technology profession and develops concepts and principles required for successful participation as a member of the surgical team. Topics include: role/responsibilities of the surgical technologist, patient needs, legal/ ethical issues, the surgical environment, asepsis, OSHA regulations, and basic patient care and safety. The course includes classroom and lab instruction, with observation experiences in the surgical, GI lab, and sterile processing settings. Prereq: Program admission; BIO250, BIO260, and HIT105; or concurrent enrollment. Coreq: SUR110.

## (2.5 lec/3 lab) <br> 4 sem hrs

## SUR 110 Surgical Pharmacology

This course introduces principles of intraoperative pharmacology as prepared and delivered by the surgical technologist, with an emphasis on patient safety. Topics include weights and measurements, drug conversion, interpretation of prescriptive orders, drug classification and concepts of anesthesia administration. The legal aspects of medication administration as well as the roles of the surgical technologist, registered nurse and anesthesia team in intraoperative pharmacology are examined.
Prereq: Program admission; BIO250, BIO260, and HIT105; or concurrent enrollment. Coreq: SUR100.
(2 lec/0 lab)
2 sem hrs

## SUR 120 Instrumentation and Practices Common to Surgical Procedures

This course orients the student to the clinical environment and provides experience with basic skills necessary to the surgical technologist or perioperative nurse. Topics include: scrub techniques, sterile gowning, gloving and draping, surgical equipment, instruments, sutures, and dressings required for surgeries in various medical fields, processing of instruments and supplies, and environmental sanitation. Clinical experience in the central processing area is included.
Prereq: Program admission; SUR100.
(3 lec/4 lab)
5 sem hrs

## SUR 150 Health Problems and Surgical Procedures I

An introduction to surgical procedures, incisions, wound closure, operative pathology and common complications as applied to general and specialty surgery is provided to the surgical technology or perioperative nursing student. The course includes a review of anatomy, physiology, pathology, and surgical interventions for procedures in the following areas: general, obstetrical and gynecologic, thoracic, peripheral vascular, otologic, head and neck, and plastic and reconstructive.
Prereq: Program admission; SUR100; SUR110; SUR120.
Coreq: SUR151.
(2 lec/O lab)
2 sem hrs

## SUR 151 Surgical Tech Externship I

This course provides a comprehensive study of intermediate and advanced surgical specialties that students are exposed to in the second clinical rotation including general urologic, orthopedic, cardiac, neurologic and ophthalmic. Emphasis is placed on related surgical anatomy, pathology and procedures that enhance theoretical knowledge of patient care, instrumentation, supplies and equipment. Upon successful completion, students should be able to function in the role of an entry-level surgical technologist.
Prereq: Program admission; SUR100; SUR110; SUR120.
Coreq: SUR150.
(0 lec/15 lab)
3 sem hrs

## SUR 200 Health Problems and Surgical Procedures II

An introduction to surgical procedures, incisions, wound closure, operative pathology and common complications as applied to general and specialty surgery is provided to the surgical technology student. The course includes a review of anatomy, physiology, pathology and surgical interventions for procedures in the following areas: general, urologic, orthopaedic, cardiac, neurologic and ophthalmic.
Prereq: Program admission; SUR120; SUR150; SUR151.
Coreq: SUR201; SUR220.
(2 lec/0 lab)
2 sem hrs

## SUR 201 Surgical Tech Externship II

This course provides a comprehensive study of intermediate and advanced surgical specialties that students are exposed to in the second clinical rotation including general urologic, orthopedic, cardiac, neurologic and ophthalmic. Emphasis is placed on related surgical anatomy, pathology and procedures that enhance theoretical knowledge of patient care, instrumentation, supplies and equipment. Upon successful completion, students should be able to function in the role of an entry-level surgical technologist.
Prereq: Program admission; SUR150; SUR151. Coreq: SUR200; SUR220.
(0 lec/15 lab)
3 sem hrs

## SUR 220 Seminar in Surgical Technology

This course serves as the capstone experience for the surgical technology student's entry into the workplace as a technical professional. Current issues in healthcare and clinical practice, career opportunities and careerseeking strategies are discussed. Topics also include professionalism, recognition as a member of the healthcare/surgical team, and certification.
Prereq: Program admission; SUR150; SUR151. Coreq: SUR200; SUR201.
(. 5 lec/0 lab) .5 sem hrs

## Sustainability (SUS)

## SUS 101 Creating Your Sustainable Future

In this course, students think sustainably about the climate crisis, fuel, renewable energy, agriculture, conserving water, poverty and wealth. Students calculate carbon footprints and explore solutions for the future.
(3 lec/0 lab)
3 sem hrs

## Theatre (THE)

## THE 100 Theatre Appreciation

This course envelops all elements of theatre as an art form: the play, playwright, acting, directing, and the production elements of lighting, set design, costumes, make up, props, sound and theatre management. Students also study the playwrights' lives and their societies.
IAI: F1 907.
(3 lec/0 lab)
3 sem hrs

## THE 110 The Art of Oral Interpretation

This course examines and explores literature from an oral performance perspective. Literary selections include the short story, poetry, drama and nonfiction. Emphasis is placed on the development of the human voice and the use of bodily movement as instruments to be used by the interpreter of literature. Incorporating the study of social and cultural contexts of literature is a primary part of a pre-performance analysis and complements the oral interpretation. Recommended Prereq: COM110; THE201; THE202; English Literature course(s).
IAI: TA 916.
(3 lec/0 lab)
3 sem hrs

## THE 130 Diversity in American Theatre

This course examines American dramas and dramatists that reflect the racial, immigrant and minority experience in the U.S. The study includes an analysis of themes, conflicts and racial/ethnic/minority characterizations in a historical, social and cultural contexts. The course demonstrates how theatre as an art form reflects and comments on society.
IAI: F1 909D.
(3 lec/0 lab)
3 sem hrs

## THE 201 Fundamentals of Acting I

This course introduces the beginning actor to acting theories that include but are not limited to the methods of Stanislavski and Uta Hagen. Stage terms, stage movement, character development, improvisation, memory and scene work make up the major content of the course. Emphasis is also given to the development of observation, sense and emotion memory, focus and concentration.
Recommended Prereq: COM110; THE110.
IAI: TA 914.
(3 lec/0 lab)
3 sem hrs

## THE 202 Fundamentals of Acting II

This continuation of THE201 is designed for the serious acting student who wishes to pursue acting for performance or for theatre education. Analysis of play text includes intention, scoring/subtext, and tempo. Incorporated in the scene work are techniques for developing contemporary and classical characters for the stage.
Recommended Prereq: COM110; THE110; THE201.
(3 lec/0 lab) 3 sem hrs

## THE 296 Special Topics/Theatre

This course offers in-depth exploration of a special topic, issue or trend in the theatre field. Repeatable to a maximum of 12 semester hours for different special topics; 6 semester hours may apply to a degree or certificate.
(0 to 3 lec/0 to 6 lab)
1 to 3 sem hrs

## Therapeutic Massage (TMS)

## TMS 100 Introduction to Therapeutic Massage

This course provides students with an introduction to massage therapy techniques and principles. Emphasis is placed on Swedish massage techniques primarily relating to the back, arms and legs. Topics covered include appropriate draping techniques, benefits, contraindications, basic strokes, and elementary anatomy and physiology. Successful completion with a grade of C or better is required prior to admission to the therapeutic massage program. Prereq: Must be 18 years of age prior to registering.
(. 5 lec/1 lab)

1 sem hrs

## TMS 110 Professional Foundations of Therapeutic Massage

This course exposes the student to major concepts, terminology, and the legal and ethical issues involved in therapeutic massage. Topics include history, contemporary development, professional ethics, scope of practice, and contemporary issues in the profession.
Prereq: Program admission; BIO260; HIT105; TMS100.
Coreq: TMS120.
(2 lec/0 lab)
2 sem hrs

## TMS 120 Massage Techniques I

Basic theory and techniques of massage therapy are reintroduced and expanded on in this beginning course. Course content includes benefits, indications, contraindications, hygiene, sanitation, draping, body mechanics, client interviews, equipment and supplies. Massage techniques combine to culminate in a full body massage.
Prereq: Program admission; BIO260; HIT105; TMS100.
Coreq: TMS110.
(2 lec/3 lab)
3 sem hrs

## TMS 125 Massage Techniques II

This course introduces the massage therapy student to intermediate level therapeutic techniques. Joint movements, body mobilizations, muscle energy techniques, sports massage, stretching and exercise are incorporated in theory and hands-on classes. Contemporary massage and bodywork topics include myofascial techniques, trigger point therapy, reflexology and others.
Prereq: Program admission; TMS110; TMS120. Coreq: TMS140.
(2 lec/3 lab)
3 sem hrs

Course Descriptions
Therapeutic Massage

## TMS 130 Massage Techniques III

This course covers the principles of holistic practice addressing body, mind and spirit. An introduction of aromatherapy, hydrotherapy, herbs, nutrition, stress reduction, meditation and the history of Asian bodywork approaches is presented. This course also includes massage for special populations; types of physical injuries; muscles involved in common injuries; and physical assessment of posture, tissues and range of motion. All of this information is used to plan massage sessions, plan client self-care and give appropriate referrals in a holistic manner. Chair massage is also included in this course, in order to work with special populations.
Prereq: Program admission; TMS125; TMS140. Coreq: TMS146; TMS164.

## (2 lec/4 lab)

4 sem hrs

## TMS 140 Massage Clinical I

This course is a supervised clinical experience designed to provide training and practical experience in therapeutic massage. Students must spend 30 hours at on- or off-campus locations experiencing real-life application of massage techniques. In addition, students spend sixteen hours in seminar discussing clinical situations, client plans and S.O.A.P. charting, as well as learning the indications and contraindications of massage with regard to common medications.
Prereq: Program admission; TMS110; TMS120. Coreq: TMS125.
(1 lec/2 lab)
2 sem hrs

## TMS 146 Massage Clinical II

This course is a supervised clinical experience designed to provide training and practical experience in therapeutic massage. Students must spend 30 hours at on- or off-campus locations experiencing real-life application of massage techniques. In addition, students spend 16 hours in seminar discussing clinical situations.
Prereq: Program admission; TMS125; TMS140. Coreq: TMS130; TMS164.
(1 lec/2 lab)
2 sem hrs

## TMS 150 Business Practices for Massage Therapists

This course provides an introduction to the major aspects of building and maintaining a successful massage therapy practice. Topics covered include starting a new practice, establishing a bookkeeping system, maintaining client records, and delivering a business plan. Prereq: Program admission; TMS110.
(3 lec/0 lab)
3 sem hrs

## TMS 162 Neuromusculoskeletal Foundations for the Massage Therapist

This course studies the human nervous, muscular and skeletal systems, and how these systems work together to produce movement. This provides the foundation for the study of biomechanics, posture and gait. This course further touches on the effects of therapeutic massage on these systems, and how massage can generally be used to improve dysfunctional patterns. This course incorporates palpation of human subjects and the use anatomical models. Prereq: BIO260 or BIO270 and concurrent enrollment in BIO272.
(2 lec/2 lab)
3 sem hrs

## TMS 164 Pathology for the Massage Therapist

This course studies how therapeutic massage can affect pathologic conditions of the human body. Beginning with the fundamental concepts of pathology and homeostasis, pathologic conditions of the integumentary system, musculoskeletal system, nervous system, cardiovascular system, lymph and immune system, respiratory system, digestive system, endocrine system, urinary system and reproductive system are covered.
Prereq: BIO260, or BIO270 and BIO272.
(2 lec/2 lab) 3 sem hrs

## Welding (WLD)

## WLD 100 Survey of Welding

This survey course covers the principles and practical application of the major manual and semi-automatic welding and cutting processes. The emphasis of this course is on the proper selection and use of each welding process.

## WLD 101 Blueprint Reading for Welders

This course emphasizes the development of print reading for welders with a focus on the interpretation of drawings, welding symbols and dimensioning standards. Several practical problems and exercises are included.
(3 lec/0 lab)
3 sem hrs

## WLD 102 Blueprint Reading for Welders I

This course emphasizes the development of print reading for welders with a focus on the interpretation of drawings.
1.5 sem hrs

## WLD 103 Blueprint Reading Welders II

This continuation of WLD102 studies welding symbols and dimensioning standards. Several practical problems and exercises are included.
(1.5 lec/O lab)
1.5 sem hrs

## WLD 115 0xy-Fuel Welding and Cutting

The theory and practice of oxy-acetylene welding (OAW) and cutting equipment are featured in this course. Fusion welded and torch brazed jointsare produced in various positions on low carbon steel.
(2 lec/2 lab)
3 sem hrs

## WLD 120 Shielded Metal Arc Welding I

The theory and practice of SMAW (Shielded Metal Arc Welding- stick) are featured in this course. Process techniques using various types of mild steel electrodes in the four positions are practiced.
(2 lec/2 lab)
3 sem hrs

## WLD 122 Welding Inspection and Testing

This course introduces the principles and applications of destructive and non-destructive testing and inspection of welds.
Recommended Prereq: WLD120 or consent of instructor.
(2 lec/O lab)
2 sem hrs

## WLD 125 Gas Metal Arc and Flux Cored Arc Welding

The theory and practice of GMAW (Gas Metal Arc Welding-MIG) and FCAW (Flux Cored Arc Welding) are featured in this course. Process techniques using mild steel and aluminum in the four positions are practiced. Welds are made using short circuit, spray and pulsed type transfers and aluminum is introduced.
(2 lec/2 lab)
3 sem hrs

## WLD 130 Gas Tungsten Arc Welding

The theory and practice of GTAW (Gas Tungsten Arc Welding-TIG) are featured in this course. Process techniques using various types of mild steel, stainless steel and aluminum in the four positions are practiced.
(2 lec/2 lab)
3 sem hrs

## WLD 150 Metallurgy and Heat Treatment

This study in the types and industrial uses of ferrous and nonferrous alloys is designed to study a material's tensile strength, harden ability, impact strength and Rockwell hardness. Non-destructive testing such as zyglo, eddy current, spot check, magna flux and ultrasonic is introduced. Heat treatment ovens and process are also covered. Emphasis is placed on the manufacture, properties and applications of these materials in industry today. Powder metallurgy is also covered.

## (3 lec/0 lab) <br> 3 sem hrs

## WLD 200 Fabrication and Weld Design

This course emphasizes skill development in metal fabrication. Layout and welding of steel plate and other structures by prints and plans are practiced.
Recommended Prereq: WLD101.
(2 lec/2 lab)

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3 \text { sem hrs }
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## WLD 220 Shielded Metal Arc Welding II

The theory and practice of SMAW (Shielded Metal Arc Welding - stick) on V-grooves are featured in this course. V-grooves with and without backing in all four positions are practiced.
Prereq: WLD120.
(2 lec/2 lab)
3 sem hrs

## WLD 221 Shielded Metal Arc Welding - Pipe I

The theory and practice of SMAW (Shielded Metal Arc Welding - stick) on pipe are featured in this course. Process techniques using various types of mild steel electrodes in the 1G and 2G positions on pipe are practiced.
Prereq: WLD220.
(2 lec/2 lab)
3 sem hrs

## WLD 222 Shielded Metal Arc Welding - Pipe II

The theory and practice of SMAW (Shielded Metal Arc Welding - stick) on pipe are featured in this course. Process techniques using various types of mild steel electrodes in the 5G and 6G positions on pipe are practiced.
Prereq: WLD221.
(2 lec/2 lab)
3 sem hrs

## WLD 231 Gas Tungsten Arc Welding - Pipe I

The theory and practice of GTAW (Gas Tungsten Arc Welding - TIG) are featured in this course. Process techniques for mild steel pipe in 1G and 2G are practiced.
Prereq: WLD130.
(2 lec/2 lab)
3 sem hrs

## WLD 232 Gas Tungsten Arc Welding - Pipe II

The theory and practice of GTAW (Gas Tungsten Arc Welding - TIG) are featured in this course. Process techniques for mild steel pipe in 5 G and 6 G are practiced.
Prereq: WLD231.
(2 lec/2 lab) 3 sem hrs

## WLD 296 Special Topics/Welding

This course offers in-depth exploration of a special topic, issue or trend in the welding field. Topics may include robotic and plastic welding or welding certification. Repeatable to a maximum of 12 semester hours for different special topics; 6 semester hours may apply to a degree or certificate.
(0 to 3 lec/0 to 6 lab) 1 to 3 sem hrs

## World Wide Web (WEB)

See also Computer Information Systems (CIS).

## WEB 110 Web Development With HTML

This course is an introduction to the World Wide Web and its authoring environment, Hypertext Markup Language (HTML5), and Cascading Style Sheets (CSS3). Web design techniques are illustrated, analyzed and implemented, along with methods to enhance Web pages using the following features: Web standards, forms, images, multimedia, sound and video.
(3 lec/O lab) 3 sem hrs

## WEB 230 Dreamweaver

Using Dreamweaver, students learn to design, update, maintain and publish fully functional websites. Repeatable to a maximum of 9 semester hours; 3 semester hours may apply to a degree or certificate.
Recommended Prereq: WEB110.
(2 lec/2 lab)
3 sem hrs

## WEB 250 Advanced Website Development

Students in this course utilize knowledge from prior web development courses and web development software programs to develop a live and fully functional website that meets current web standards. Current web development strategies and topics are discussed and appropriately incorporated into student websites.
Recommended Prereq: WEB110. Prereq:
WEB230.
(2 lec/2 lab) 3 sem hrs

## WAUBONSEE

how to take the first step

## Admissions and Registration

## Procedures for Admission

Waubonsee Community College has an open-door policy and welcomes all who can benefit from the courses and programs offered. Eligible students include high school graduates or the equivalent ( $\mathrm{ABE} / \mathrm{ASE}$ or HSE), others 18 years of age and older, non-graduates aged 17 who have severed their connection with the high school system, and students younger than 18 years of age who meet established criteria.

To be placed in some programs or curricula, students may need to meet additional requirements as specified by that program and/or the Illinois Public Community College Act.

## Admission of Full-Time and/or Degree-Seeking Students

Students in the following categories need to submit a New Student Information Form, obtain proper course placement, and complete an Electronic Registration and Planning (E-RAP) session:

- full-time (enrolled in 12 credit hours or more in one semester);
- applying for financial aid;
- seeking a degree or certificate.

View the New Student Information Form online at www.waubonsee.edu/nsif.

While not usually required prior to registering, students may find it valuable to submit official transcripts from their previously attended high school, ABE/ASE or HSE program, or college(s) to Registration and Records for course placement purposes. Waubonsee cannot request these; students must personally complete this request for each school from which they order transcripts.

Students may be placed into courses based on their ACT, SAT or PARCC scores, placement test results or prior coursework. Visit www.waubonsee.edu/placement for more specific criteria and details.

Waubonsee's placement testing measures current skill levels in reading, writing and mathematics. A free online preparation tool is available at www.waubonsee.edu/testprep. Self-study materials may be purchased in the college bookstore or by visiting https:// accuplacer.collegeboard.org/students/prepare-for-accuplacer.

Once course placement has been obtained, all new full-time and/or degree-seeking students must complete the Electronic Registration and Planning (E-RAP) tutorial.

All students pursuing a transfer degree program must meet the Illinois Board of Higher Education admission standards. Those standards are described in this catalog under "Transfer Degrees Program." Students who do not fully meet these requirements are required to make up any deficiencies during their first year as a full-time student.

## New Student Registration and Orientation

All first-time, full-time students are required to complete a specific registration and orientation process. The two major components of this process are E-RAP and New Student Orientation.

## E-RAP

New first-time, full-time students must complete an Electronic Registration and Planning (E-RAP) tutorial before registering for courses. New part-time students are strongly encouraged to complete E-RAP. The tutorial explains Waubonsee's degree and certificate programs and teaches students how to use the college catalog, credit schedule and test scores to select courses. Students then register and pay for their first semester of courses online.

Students can access E-RAP through the mywcc portal at mywcc.waubonsee.edu. An X-number is needed to login.

## NEW STUDENT ORIENTATION FOR FULLTIME AND/OR DEGREE-SEEKING STUDENTS

After completing E-RAP and registering for courses, new full-time students must also register for a New Student Orientation session (NSO 600). The registration process is the same as for any other course, but these sessions are free and do not earn college credit.

New Student Orientation sessions are offered July and August for fall term and January for spring term. To view available dates and times, visit www.waubonsee.edu/schedules. For more information, see "Getting Started at Waubonsee" on page 10 or call Admissions at (630) 466-7900, ext. 5756.

## Admission of Part-Time and/or Non-Degree-Seeking Students

Students enrolling in fewer than 12 credit hours per semester and/or not seeking a degree or certificate must complete the New Student Information Form before registering for their first semester of classes. The form can be found online at www.waubonsee.edu/nsif.

Prior to enrolling in English or mathematics courses, students in this category are required to obtain proper course placement based on ACT, SAT or PARCC scores, placement testing results or previous coursework. For details and test preparation tools visit www.waubonsee.edu/placement. Self-study materials may also be purchased in the college bookstore or by visiting https:// accuplacer.collegeboard.org/students/prepare-for-accuplacer.

Before registering, new part-time students are strongly encouraged to complete Electronic Registration and Planning (E-RAP). Students can access E-RAP through the mywcc portal at mywcc.waubonsee.edu. An X-number is needed to login.

New part-time and/or non-degree-seeking students must register for courses in person or by mail or fax, once they have completed a New Student Information Form. See registration instructions in the current schedule of courses or online at www.waubonsee.edu/register.

## Admission of Transfer Students TRANSFERRING CREDITTO WAUBONSEE:

Students wishing to transfer credit to Waubonsee from other accredited colleges and/or universities should follow the procedures described on page 227 for new full-time and/or degree-seeking students. They should also:

1. Submit official transcripts from all previous regionallyaccredited colleges and/or universities to Registration and Records.
2. Once you have an X-number and can log in to my wcc, complete the online Transcript Evaluation Request Form (TERF) located in the "Student Forms" section of the mywcc Student Tab.

Transfer credit will be evaluated after Waubonsee receives the official transcripts. Evaluation results are emailed to the student within four weeks of receipt of official transcripts.

Students may meet with a counselor or advisor to receive an unofficial credit evaluation and degree plan at any time while they are awaiting their official results. For more information regarding which types of credit are accepted for transfer into Waubonsee and how these credits apply to Waubonsee degree/certificate programs, see page 243 .

## Admission of Noncredit Students

Students interested in Community Education or Workforce Development should complete the Noncredit Registration Form, found in each semester's noncredit schedule or online at www. waubonsee.edu/register.

## Reclassification of Student Status

A non-degree-seeking student who decides to pursue a degree or certificate or a part-time student who wishes to enroll in 12 or more semester hours must complete the New Student Information Form if one is not on file or the Student Information Change Form available through the mywcc portal or in person at the Registration and Records or Admissions office. Once the form is completed the student must follow assessment and E-RAP procedures described earlier for new full-time and/or degreeseeking students.

## Programs with Special Admission Applications

Certain programs at Waubonsee have specific entry requirements as well as limited enrollment capacities. Depending on the number of applicants, enrollment priority for these courses may be based on district residency. Students who have out-of-district charges waived under the Special Residency Classifications are not considered district residents. See page 233 for more information on Special Residency Classifications.

In accordance with Illinois Statute 110 ILCS 805/3-29.10, veterans or military service members that have current eligibility for either federal VA education benefits or Illinois military grants will be granted priority admission into the limited enrollment programs. Students must meet the program admission requirements and attach
a copy of the benefit's Certificate of Eligibility to the specific program application. Confirmation of benefit eligibility by the Financial Aid Office will determine consideration for priority admission.

## Honors Program

Waubonsee Community College has offered an academic Honors Program to its most academically successful students for more than 30 years. The Honors Program is designed to recognize academically talented and highly motivated students and to assist the development of independent and creative thinking skills through individual class projects that require work above and beyond the normal course requirements.

## PARTICIPATION IN THE HONORS PROGRAM:

- fosters collaborative relationships between students and faculty;
- provides a competitive advantage in college admissions and scholarship applications;
- features a special transcript notation indicating honors courses taken;
- all students graduating from Waubonsee who have completed 15 or more semester hours of honors courses with a 3.5 cumulative grade point average in all credit semester hours and a 3.0 grade point average in all honors courses are designated as an Honors Program graduate;
- provides consideration for educational expenses.

Students are required to apply for admission to the Honors Program. Students may consider 100 and 200 level coursework for the Honors Program. Courses that are scheduled for less than eight weeks and developmental courses are not eligible.

## Criteria for Admission to the Honors Program

Note: Documentation must be provided as proof that criteria have been met.

## STUDENTS ENTERING COLLEGE FOR THE FIRSTTIME:

- are required to have a high school diploma or its equivalent;
- must be in the top 10 percent of their high school graduating class, OR have an ACT score of 27 or higher, OR have an SAT score of 1150 or higher;
- must submit a letter of recommendation from an individual who can verify their ability to succeed in an honors program;
- must obtain Honors Committee approval before taking classes for honors credit;
- final approval for entry into the Honors Program rests with the Honors Program Director.


## STUDENTS WITH

EXISTING COLLEGE CREDIT:

- must have a minimum of 12 college transfer-level hours from Waubonsee or another accredited institution with a minimum GPA of 3.50 (credit for developmental course work is excluded);
- must verify that this credit has been earned within the last 5 years;
- must submit a letter of recommendation from an individual
who can verify their ability to succeed in an honors program;
- must obtain Honors Committee approval before taking classes for honors credit;
- final approval for entry into the Honors Program rests with the Honors Program Director.

The goal of the Honors Program is to provide opportunities to broaden and enrich the college experience of intellectually motivated students at Waubonsee Community College. Honors students who do not complete course requirements by the end of the semester are subject to the " I " grade and associated policies. For additional information, contact the Honors Program at Dickson Center, Room 224, ext. 2723.

## Admission of High School Students

Current high school students who are at least 16 years of age during the term they are registering for will be permitted to enroll in credit courses for which they have met the prerequisites. Students must submit written authorization from their designated high school official noting course(s) to be taken if course(s) will be used to meet high school requirements. See the High School Student Registration and Authorization Form online at www. waubonsee. edu. High school students are not eligible to audit courses.

Curent high school students younger than 16 years of age should (1) speak with an Admissions Advisor either over the phone or in person to discuss goals and course selection and (2) submit the signed copy of the Underage High School Student Authorization Form (in addition to the High School Student Registration and Authorization Form) to Registration and Records to register prior to the end of the last business day before the course starts. Please note both forms require authorization signatures from the student's high school. The forms are available online at www.waubonsee.edu. Placement testing and/or academic dean approval for certain subject areas may also be required.

Students who are pursuing high school level curriculum through home schooling or other means are eligible to enroll based on similar requirements as students enrolled in accredited high schools.

Final Grades will appear on the student's permanent college transcript regardless of the grade earned. For questions regarding enrollment of high school students, contact Registration and Records (see directory).

## Admission of International Students (I-20)

A person who is a citizen of a country other than the United States and is requesting I-20 documentation and full-time admission to Waubonsee Community College is considered an international student. Persons requesting international status at Waubonsee for entry or continued stay in the United States must be doing so for educational purposes only. Applications will be accepted only for degree programs, not for English as a Second Language courses or certificate programs. To apply for international student status, this person must:

1. Submit an Application for Status as International Student (I-20/F-1 status). Application packets are available from the Admissions office or online at via online request at https:// www.waubonsee.edu/admission/enroll/new-students/ international/index.php. Applications and all supporting documents must be received by the following deadlines: July 1 for fall semester, November 1 for spring semester and April 1 for summer semester.
2. If the student's native language is NOT English, he/she must take the Test of English as a Foreign Language (TOEFL) and attain a minimum score of 500 (paper-based) or 173 (computer-based) or 61 (Internet-based) on the examination. For information on the test, write TOEFL Services, Educational Testing Services, P.O. Box 6151, Princeton, NJ 08541-6151, USA or visit the TOEFL website at www.toefl.org.
3. Complete the Educational Background forms and submit transcripts from high school and college or the equivalent. If the transcripts are NOT from a United States high school or college, they must be submitted for evaluation at the applicant's expense by a credential evaluator that is a member of the National Association of Credential Evaluation Services (NACES). Contact: Educational Credential Evaluators, P.O. Box 514070, Milwaukee, WI 53202-3470 or at the ECE website at: www.ece.org.
4. Present the Immigration and Naturalization Service Affidavit of Support form (I-134). This form must be completed by a resident of the United States. The statement is necessary in recognition of the fact that the college does not provide food, housing, health or transportation services.

The Admissions office will notify the applicant of admission approval or denial after the deadlines listed above. If accepted, the necessary U.S. Immigration and Customs Enforcement (ICE) form (I-20) will be forwarded to the student with instructions for submission and enrollment at the college.

If approved for international student status, a person must observe the following:

- enroll in the fall and spring semesters in a minimum of 12 semester hours;
- meet with the international student advisor before registering for each semester;
- pay international tuition rates (see Tuition and Fees);
- report any changes in address, support, and/or temporary leave or status to the international student advisor immediately;
- follow the standard academic and disciplinary policies of the college.

Questions regarding the international status of a student can be referred to Admissions (see directory).

## Joint Admission and Dual Degree Partnerships

## Waubonsee and Aurora University (Joint Admission)

## Waubonsee and Northern IIIinois <br> University (Joint Admission)

Waubonsee Community College has entered into joint admissions agreements with Aurora University and Northern Illinois University (NIU). The joint admissions agreements provide a means for students to be simultaneously admitted to Waubonsee and either Aurora University or NIU. These agreements simplify the process of degree completion for students who wish to begin at Waubonsee and continue at Aurora University or NIU.

When jointly admitted, students work with counselors at both Waubonsee and the four-year school to plan courses for maximum transferability. Students can enter Aurora University or NIU after completing the Waubonsee degree without going through any further admissions processes.

To be eligible for joint admissions under these agreements, students must meet all applicable admissions requirements for both Waubonsee and Aurora University or NIU. Students agree in writing to the exchange of admissions and advising information between Waubonsee and the four-year school. The program is open to any eligible student at Waubonsee. For further information and application materials, contact Counseling at Waubonsee (see directory), Aurora University at (630) 844-6535, or Northern Illinois University at (815) 753-0446 and ask for the Transfer Center.

## DePaul University - DePaul Admission Partnership Program (DAPP)

Students can sign up for this partnership if they have fewer than 30 semester hours at Waubonsee, or they may join before their first semester here. By also applying to DePaul as a transfer student, they will lock in DePaul degree requirements for three years. Students will meet with both Waubonsee and DePaul counselors during their time at the community college. Students must be in "good standing" at Waubonsee, by maintaining a 2.0 GPA or higher. Students will submit transcripts to DePaul after every semester and follow DePaul's admission process when transferring out after receiving an associate degree.

## Governors State University Dual Degree Program (DDP)

The dual degree agreement guarantees that participating Waubonsee students, after earning their associate degree in two years, will be able to complete a bachelor's degree at Governors State University (GSU) with some significant benefits. Their GSU tuition will be fixed at the rate in effect when they begin their freshman studies at Waubonsee. They will be eligible to compete for the debt-free education offered by the GSU Promise Scholarship, while also receiving the guidance of both institutions during their studies.

## Roosevelt University - Dual Degree Program (DDP)

The Dual Degree Program (DDP), a unique partnership between Waubonsee Community College and Roosevelt University, provides a pathway for full-time students to earn quality, accessible, and affordable associate and bachelor's degrees close to home. Benefits include guaranteed admission to Roosevelt, guaranteed tuition discount plan, eligibility for scholarships, and dual advising from Waubonsee and Roosevelt.

To be eligible for the program, students must be enrolled full-time at Waubonsee, be in good academic standing, and have less than 30 hours of credit earned at the community college-level before signing up for the program. Upon completion of the associate degree, students will have seamless transfer to the four-year university.

## Northern Illinois University - <br> Reverse Transfer Program

Northern Illinois University (NIU) and Waubonsee Community College have an agreement that allows NIU students who transferred from Waubonsee without an associate degree to earn the two-year degree using credit from NIU courses.

## Auditing a Course

Students who wish to audit a course without receiving credit can contact Registration and Records. Audit registration is not available for skill or performance courses. Students registering for a course for credit have first priority. Auditing students (including senior citizens) pay full tuition and fees, and they must meet the course pre-requisites. See "Tuition and Fees" for details. Students registered for credit have up until midterm of a course to change to audit status. Once the course has started, auditing students cannot change to credit status. High school students are not eligible to audit courses.

## Administrative Withdrawal

Waubonsee Community College reserves the right to administratively withdraw those students

- who are not actively attending or pursuing course objectives as established by their instructors,
- who are enrolled in courses not consistent with placement testing and course prerequisites,
- who fail to pay their tuition and fees, or
- who receive sanctions from the Student Conduct Board.

Call Student Life for more information (see directory).

## Student-Initiated Withdrawal

Students are responsible for officially withdrawing from each course(s) they are no longer attending. A student who withdraws from a credit course after the end of the refund period will receive a withdrawal grade (not used in calculating GPA). Students who fail to properly withdraw from a course may receive a failing grade of F for that course.

The last day to withdraw from a course depends on the course length. See "Important Dates," listed in each semester schedule or online at www.waubonsee.edu.

Students should be aware of the impact of a withdrawal on fulltime status for financial aid eligibility. Students should consult with a counselor prior to withdrawing from a class to determine the best course of action for their individual situation.

## Withdrawal Due to Active Military Service

In accordance with Illinois Statute (330 ILCS 60/5.2), students who are called to active military service have the right to receive a refund of tuition and fees, applicable to their registration, when called to duty for a period of seven or more consecutive days. To initiate the withdrawal process, eligible students should first withdraw from the affected course(s) and complete the Tuition Appeal Form, printable from their mywcc portal, and attach a copy of their orders. Withdrawn students will receive a notation on their official transcript that reflects that the withdrawal is due to military service. Additional information on the Withdrawal Due to Active Duty Policy can be found on the website at www. waubonsee.edu/veterans. Questions should be directed to the Veterans Services staff.

# Tuition and Fees 

## Tuition and Fees

Waubonsee Community College charges tuition and fees for credit courses. By registering for a credit course, students agree to pay the required tuition and fees for that course. Tuition is charged per semester hour and varies depending upon residency. Tuition rates and fees are subject to change, and students should anticipate increases in tuition and fees as they continue their education at Waubonsee.

## Residency

For the purpose of determining tuition and fees, students enrolling at Waubonsee are classified as in-district students, out-of-district students, out-of-state students or international students.

## In-District Students

To qualify as district students, individuals must reside within the district for at least 30 days immediately prior to the date established by Waubonsee for classes to begin.

Special cases regarding legal residency of students are considered individually. Students may be required to furnish legal evidence proving residency in the district. Contact Registration and Records for more information (see directory).

## Out-of-District Students

Students who reside in Illinois for at least 30 days prior to the date established by the district for classes to begin, but outside of Community College District 516, are considered out-of-district students. Students may be required to furnish legal evidence proving residence.

Out-of-district students who want to attain an occupational degree or certificate offered only at Waubonsee and not at their own district community college should refer to "Cooperative Agreement."

## Out-of-State and International Students

Students whose legal residence is outside of Illinois are considered out-of-state. Students whose legal residence is outside of the country are considered international students.

## Special Residency Classifications

Students who live out-of-district may qualify to have out-ofdistrict charges waived under the special residency classifications listed below. Students approved for these classifications are not considered district residents. Please contact the Registration and Records office for more information.

In-District Employment: Students who do not live in the district but who are employed by a business in the district for at least 35 hours per week may have out-of-district charges waived. Students are required to furnish legal evidence of employment every term.

Property Owner: Students who do not live in the district but own property in the district may have out-of-district charges waived. Students are required to provide documentation every term.

Attended VALEES participating High School: Students who do not live in the district but who attended a VALEES member district school with a date of high school graduation or last term of high school attendance that is within two years may have out-of-district charges waived for nine consecutive terms (includes summer terms). Students are required to provide an official high school transcript. See page 14 for more information about VALEES.

Attended an In-District High School: Students who do not live in the district but who attended a high school within Waubonsee's district with a date of high school graduation or last term of high school attendance that is within two years may have out-of-district charges waived for nine consecutive terms (includes summer terms). Students are required to provide an official high school transcript.

## Tuition

Tuition for college credit courses is charged per semester hour and is determined by residency.

## *Estimated Tuition per Semester Hour

In-district student. . $\$ 126.00$
Illinois out-of-district student ............................................. $\$ 305.75$
Out-of-state student ......................................................... \$330.11
International student........................................................... \$330.11
*Tuition rates and fees are subject to change during the academic year.

## Fees

Waubonsee charges the following fees:

## Fee Schedule

Student fee ........................................................... $\$ 8 /$ /credit hour
Course fee ..............................................................................varies
Set-up fee for payment plan option
(per semester/nonrefundable) .......................................... $\$ 25.00$
Late payment fee................................................................. $\$ 20.00$
Re-enrollment fee (after first day of class; non-refundable) .. $\$ 50.00$
Insufficient funds charge ..................................................... $\$ 25.00$
Delinquent account fee......................................................... $\$ 25.00$
Transcript Fee
Written request................................................. \$10.00/each
Online request................................................... \$5.00/each
Free unofficial transcripts are available through mywcc.

## Student Fees

The student fee is assessed at a rate of $\$ 8$ per credit hour. Student fee monies are used to support a variety of services and educational, scholarship, social, recreational, club and entertainment programs.

## Course Fees

Certain courses require extra costs for supplies, equipment or services. A course fee is charged to partially cover this extra expense. These fees are subject to change.

NOTE: All costs and fees are subject to change by the college. Students should anticipate increases in tuition and fees as they continue their education at Waubonsee.

## Tuition for Senior Citizens

Students 65 years of age or older who are residents of the district are eligible for a tuition refund for credit courses in which they were enrolled through the midterm date. Refunds are processed and mailed to the student at the end of the term. Courses specifically designed for senior citizens, audits or repeated courses do not qualify for tuition refunds.

## Cooperative Agreement

Students in Waubonsee's District 516 who wish to pursue career and technical education degree and certificate programs not available at Waubonsee Community College may do so through cooperative agreement.

Cooperative Agreement: Waubonsee participates in the Community College Educational Agreement: Comprehensive Agreement Regarding the Expansion of Education Resources (CAREER). Through this agreement, a resident of District 516 may attend another participating community college at the other school's in-district tuition rate. All Illinois community colleges participate in this agreement.

For information and guidelines regarding the cooperative agreement, contact the Vice President of Student Development (see directory). Out-of-district students who want to enroll in a program at Waubonsee under a cooperative agreement should contact their own community college first to make initial application.

## Paying for Classes

- Full or partial payment is due at the time of registration.
- Earlier registration means smaller monthly payments! See partial payment below.
Note: Any prior balance must be paid in full prior to registration.


## WHAT ARETHE PAYMENT OPTIONS?

- Full Payment: Tuition and fees totaling less than $\$ 200$ require full payment.
- Partial Payment: Students must pay the required first installment and the remaining balance in monthly payments. (A $\$ 25$ nonrefundable set-up fee is charged for selecting this option - it's automatic when students make the first payment.)
- Financial Aid/Scholarship: If a student is paying the balance with Financial Aid/Scholarships which include Waubonsee Gustafson and/or Waubonsee Foundation scholarships in full this will ensure your registration is held for the term. If Financial Aid/Scholarships is covering a portion of the balance, you must pay the remaining balance in full or set up a payment plan.
- Employer Payments: If a student's employer is paying his/her tuition and fees, and should be billed directly, a letter from the company, including the contact name and company address (on company letterhead), is required at the time of registration.

Questions? Contact the Bursar Office at (630) 466-5705.

## FINANCIAL AID AND SCHOLARSHIP RECIPIENTS

Students should apply for financial aid at least three months prior to registration and coordinate with the Financial Aid Office before registration to ensure that loans, grants, and/or scholarships are applied at the time of registration. Students who have not accepted their financial aid award letter online through mywcc prior to registration must make a payment in order to hold their classes.

## HOWTO PAY

Pay by cash, electronic check* or credit card (VISA, MasterCard, Discover or American Express). Full or partial payments can be made:

- online at mywcc.waubonsee.edu (credit card or electronic check);
- in person at the Sugar Grove, Aurora Downtown, Aurora Fox Valley or Plano campuses;
- by faxing payment information to (630) 966-4867;
- by mailing payment to:

Bursar Office
Waubonsee Community College
Route 47 at Waubonsee Drive
Sugar Grove, IL 60554-9454.

- Authorized User: If students wish to have their parents, employers or other third party make a payment on their account, you must first set them up as an authorized user in the system. The assignment does not give the authorized user the ability to access the student's confidential academic history.
* Waubonsee processes checks electronically. When students provide a check as payment, they authorize the college to use information from their check to make a one-time electronic fund transfer from their account. There will be a $\$ 25$ fee for any insufficient funds/ declined checks. For questions call (630) 466-5705.


## What If I Don't Pay?

Waubonsee cancels registration if students do not select a payment option at the time of registration. Payment is required even during college holidays and breaks.

Students withdrawn for non-payment after the first day of class must appeal to re-enroll in that course. A non-refundable \$50 re-enrollment fee plus a minimum of one-half of the tuition is due when re-registering. Submit a completed Late Enrollment Appeal Form (available online) to Registration and Records in person or by fax at (630) 466-4964.

Students must officially withdraw from each course they do not plan to attend. Enrollment will not be cancelled if any payment has been received for the semester.

Unpaid fees will prevent registration for additional courses or receipt of grades, diploma, and/or transcripts and are subject to the collection procedures of the college and a $\$ 25$ delinquent fee.

## Refunds and Student Account Appeals

Tuition refunds are issued based upon the official date of withdrawal. Withdrawals made online are effective when the transaction is complete. Withdrawals submitted in writing are effective according to the postmark date of the letter or the fax date and time. Full refund of tuition and fees is granted if the college cancels a course.

The academic calendar for each semester lists the last day for refunds for 16-week courses. Also see "Important Dates," listed in each semester schedule, for additional refund dates. A student account appeal process is available if disputing a charge(s) and must be based on circumstances which prevented attending a course(s). Student account appeal forms are available at mywcc. waubonsee.edu.

The college reserves the right to make the final decision on all refunds. Contact the Bursar Office regarding refund policies.

## Textbooks

Students are expected to buy their own textbooks and supplies as specified for each course. These may be purchased at one of the college bookstores or online at www.waubonsee.edu/bookstore.

Cost for books and supplies are listed by course at www.waubonsee.edu/schedules but are subject to change by the publisher.

## (c) See directory inside back cover.

# WAUBONSEE 

the help available

## Financial Aid

## Financial Aid

Four basic types of financial aid are available to Waubonsee students: grants, scholarships, loans and employment. For complete information about financial assistance, contact the Financial Aid Office (see directory) and obtain a copy of the "2017-2018 Financial Aid Handbook," or go online at www.waubonsee.edu/financialaid.

## General Application Procedure

Details on the application process can be found online at www.waubonsee.edu/financialaid.

Students must apply each academic year. The application process starts October 1 for the following academic year starting in the fall.

Refer to the "Financial Aid Handbook" each year for detailed timelines and important deadlines.

## Eligibility Requirements

General eligibility requirements for state and federal financial aid programs include the following criteria. Other requirements may apply for certain programs. Students must be sure they meet all requirements before applying:

- be a citizen or eligible noncitizen;
- have a valid social security number;
- have a high school diploma from an accredited high school or high school equivalency;
- have a reading score on the ACT, SAT, PARCC or placement test that meets the minimum requirement to complete a certificate or degree at Waubonsee. Placement testing is done by the Learning Assessment and Testing Services;
- not be in default on any student loan;
- not owe a refund on any grant or loan, and not have borrowed in excess of the loan limits under Title IV programs at any institution;
- agree to use any student financial aid solely for educational purposes;
- agree to not engage in the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance during the period covered by federal student aid;
- if required, register with the Selective Service;
- submit a Waubonsee Community College New Student Information Form and select an eligible program.
A certificate program must be at least 16 credit hours to qualify. A list of ineligible programs is available online at www.waubonsee.edu/financialaid;
- enroll for eligible classes. A list of ineligible classes is available online at www.waubonsee.edu/financialaid;
- make satisfactory academic progress toward a degree or certificate as defined in the Standards of Academic Progress;
- be aware that financial aid does not cover audited courses or more than one repeat of a previously passed course;
- accept the Terms and Conditions of all financial aid offered.


## Standards of Academic Progress

In accordance with the United States Department of Education, and State of Illinois regulations, Waubonsee Community College has established minimum Academic Progress guidelines for the receipt of financial aid. These standards apply to all students who apply for grant, loan, and/or work-study funds from state or federal programs of financial aid. The standards apply to cumulative academic performance regardless of whether or not the student was an aid applicant during each term of attendance.

## 1. COMPLETION RATE REQUIREMENT

## Students must complete at least 67 percent of all credits

 attempted in order to finish their academic programs within the Maximum Timeframe (see \#3 below). The 67 percent completion rate applies to the total of transfer credits accepted plus Waubonsee credits earned divided by the total of transfer credits accepted plus Waubonsee credits attempted, and to the total credits earned at Waubonsee divided by the total credits attempted at Waubonsee. Both completion rates must be at least 67 percent. Also, for any Waubonsee term that a student attempts 12 or more credits, the percent earned must be greater than 0 . If the cumulative completion rate is less than $67 \%$ after two or more terms, aid eligibility can be reinstated if the student completed all courses attempted (no withdrawals) earning a minimum of 6 credits with a semester GPA of 2.0 in the last term of attendance. See APPEAL/REINSTATEMENT below.a. "Credit hours earned" refers to Waubonsee course credits for which the student received grades of $\mathrm{A}, \mathrm{B}, \mathrm{C}$ or D and to the transfer credits accepted towards the student's program of study.
b. "Credit hours attempted" includes all credit classes in which the student is enrolled after the refund period and to transfer credits accepted toward the student's program of study. -Withdrawals after the refund period count as hours attempted. See "Withdrawals and Financial Aid" on page 239 for details about withdrawing.
c. Audits, proficiency tests and noncredit courses are not included in the total number of credits attempted or completed.
d. Repeated courses are always included in attempted hours. A repeated class for which the student earns credit is only counted once in completed hours unless the class is designated as one that can be repeated. This information is part of the course description in each term's Credit Course Schedule.

## 2. GRADE POINT AVERAGE REQUIREMENT

A student must maintain a 2.0 cumulative grade point average. Federal regulations require the college to take into account a student's academic performance throughout the course of study, regardless of whether or not the student previously received financial aid. Grades for repeated classes for which the student earns credit are averaged. If the cumulative GPA is less than 2.0 after two or more terms, aid eligibility can be reinstated if the student completed all courses attempted (no withdrawals) earning a minimum of 6 credits with a semester GPA of 2.0 in the last term of attendance. See APPEAL/REINSTATEMENT below.

## 3. MAXIMUM TIMEFRAME REOUIREMENT

Student eligibility for financial aid at Waubonsee Community College is limited to 90 total attempted credit hours, which represents 150 percent of standard program length, or to the first AA, AS, or AAS earned by the student, whichever occurs first. The 90 hours include transfer hours accepted from other institutions.

## 4. EVALUATION AND ACADEMIC PROGRESS STATUS

A student is evaluated for academic progress following the completion of each academic term and his/her status will be one of the following:

PASS - The student is in the first term of enrollment and has not received grades, has not enrolled for credit courses or is meeting all academic progress standards.

WARN - The student does not meet the required completion rate or GPA requirement as outlined in this policy. A student is able to receive financial aid while at WARN.

FAIL - The student fails to meet the completion rate or the GPA standard at the end of the WARN term or the student attempts 12 or more credits during a term and completes 0 credits. The student is not eligible for federal and state financial aid programs.

FAIL-A - If a student does not complete all courses attempted with a 2.0 average in each term subsequent to an appeal being approved, the student's status will change to FAIL-A, FAIL after appeal.

DENIED - The student's appeal is denied.
MAX - The student has attempted a total of 90 credits including transfer credits.

MAX-D - The student has earned an AAS, AA or AS degree.
MAX-W - The student has attempted a total of 65 credits including transfer credits. A student is able to receive financial aid while at MAX-W.

MAX-A - The student is taking the courses that were submitted and approved on the Financial Aid Degree Audit.

PROBATION - ACADEMIC PLAN - The student's Appeal is approved including a Financial Aid Academic Plan. A student remains in a PROBATION status as long as all courses are completed with a 2.0 GPA average in each term subsequent to the Appeal being approved and the student is not at a MAX status.

## 5. APPEAL/REINSTATEMENT

Appeal requirements are based on the student's ineligible status:
FAIL - The student may submit and Appeal/Reinstatement Request. To be approved, the student must meet one of the following:

- Appeal - There must be documentable mitigating circumstance, like medical, that affected the academic performance. Failure to provide the required documentation for mitigating circumstances will result in denial.
- Reinstatement - Aid eligibility can be reinstated if the student completed all courses attempted (no withdrawals) earning a minimum of 6 credits with a semester GPA of 2.0 in the last term of attendance. Earned hours must have increased by 6 .

If the Appeal/Reinstatement Request meets one of the above requirements, the student will be notified that he/she must meet with a Counselor to prepare a Financial Aid Academic Plan. This Plan must signed by a Counselor and be submitted to the Financial Aid Office before the Appeal/Reinstatement Request will be approved for the upcoming term. The Financial Aid Academic Plan will specify the point in time when the student should be meeting the standards. Until the student is meeting the standards, he/she will be at a status of Probation-Academic Plan.

MAX - The student is required to appeal and submit a Financial Aid Degree Audit signed by a counselor. The Degree Audit lists the courses that are required for the student to complete his/her degree or certificate program. Students can also appeal to complete preparatory courses required for acceptance to an academic program at another school by submitting a letter from the other school listing the courses that are required for admission. If approved for the additional courses, the student's status is changed to MAX-A.

MAX-D - An appeal and Financial Aid Degree Audit signed by a Counselor may be submitted for the pursuit of a second degree or for preparatory courses required for a second degree. Only courses on the Financial Aid Degree Audit are recognized for the receipt of financial aid. If the student applied to graduate but he/ she has not completed all required courses, the student can change his/her graduation term by contacting the Graduation Analyst in Counseling. If approved for a second degree, the student's status is changed to MAX-A.

Appeal/Reinstatement Requests must be submitted within 30 calendar days following the date the student's academic progress is reviewed and the student is notified of the ineligible status. Appeals turned in after the 30 deadline can be denied. Appeals will be reviewed by the Financial Aid Appeals Committee responded to within 14 calendar days of receipt.

## 6. RE-ESTABLISHING ELIGIBILITY

A student who is below the Completion Rate and/or GPA requirements can re-establish eligibility by achieving a cumulative 2.0 GPA and/or a 67 percent completion rate as long as the student is not at MAX due to 90 attempted hours or the completion of an AA, AS, or AAS degree. Once eligibility is re-established, the student's status will be PASS.

## 7. NOTICE

This policy is subject to change without notice to comply with federal or state regulations, or Waubonsee Community College Board of Trustee policy or action. For the most current Satisfactory Academic Progress Policy, visit waubonsee.edu.

## Withdrawals and Financial Aid

Federal regulations require students to maintain a minimum completion rate (see Standards of Academic Progress) to retain eligibility. Withdrawing from a course(s) or failure to earn credit hours in a course(s) will lower student's completion rate. Withdrawing from all courses or failure to successfully complete all course(s) may require a student to pay back the financial aid he/she may have received. Consultation with a counselor is highly recommended before withdrawing.

## - Withdrawing from some but not all courses.

If the courses remaining in the student's schedule total less than 6 credit hours, the student is not loan eligible. Student loans require a minimum of 6 credit hours at the time of disbursement.

## - Withdrawing from all courses.

This results in a reduction to federal aid eligibility including grants and loans. Federal regulations require that students "earn" their financial aid by attending or participating in class. Waubonsee records attendance at the end of the 100 percent refund period and at mid-term. These attendance records determine the amount of financial aid that has been earned by a student who withdraws from all courses. For example, withdrawing from all courses after mid-term would result in reducing a $\$ 1,000$ Pell Grant or Direct Loan to approximately $\$ 500$ (50 percent) because mid-term would have been the last recorded date of attendance. This reduction in financial aid could result in the student owing institutional charges, and, if the withdrawal occurred after the financial aid was disbursed, a repayment of all or part of any refund that was based on the original Pell Grant or Direct Loan amounts.

## - Failure to successfully complete courses.

Students who do not complete at least one course with a final grade of A,B,C or D are considered unofficial withdrawals. Last dates of attendance are reported by instructors for students whose final grades are Fs or Ws. The last dates of attendance are used to determine the percentage of federal financial aid that has been earned. If the latest date that the student attended is not after the 60 percent point of the term, financial aid will be reduced to equal the percentage earned. For example, if the latest date of attendance reported by an instructor is midterm, a $\$ 1,000$ Pell Grant or Direct Loan would be reduced to approximately $\$ 500$ ( 50 percent). This reduction in financial aid could result in the student owing institutional charges and a repayment of all or part of any refund that was based on the original Pell Grant or Direct Loan amounts.

## Disbursement of Financial Aid Funds

Financial aid funds will be reflected on the student's account only after the student has submitted a Title IV Authorization and accepted his/her financial aid award online through the mywcc portal. Loans and state grants are disbursed the third week of a full fall or spring term. Pell grants are disbursed after mid-term. A bookstore voucher will be processed if financial aid funds are sufficient to cover all current term charges on a student's account and the student does not owe a prior balance. Financial aid awards are subject to reduction if a student drops some or all of his/her courses.

## Financial Aid Refund Policy

Refunds based on the difference between institutional charges for the term and loan amounts are mailed to permanent local address or direct deposited no later than 14 days after aid is disbursed.

## Veterans Programs

Students interested in VA benefits, Illinois veterans' benefits and any other related programs can find details on the application process online at www.waubonsee.edu/veterans. Additional questions may be directed to the Transfer/Veterans Advisor. A 2.0 cumulative GPA is required to maintain eligibility for state and federal benefits.

## Scholarships

A variety of scholarships are available to Waubonsee students from the Waubonsee Community College Foundation and private funding sources. The Foundation awards more than 250 scholarships annually. Information about the opportunities can be obtained from the Advancement Office (see directory) or online at www.waubonsee.edu/foundation. Waubonsee Community College Foundation scholarship applications are typically due in February for use during the following academic year.

## WAUBONSEE

what you need to know

## Academic Information and Regulations

## Certificates of Achievement

Certificates are awarded at the end of the semester the coursework is completed or the semester the application is submitted if the coursework was previously completed.

Application for Certificate forms can be found at mywcc, on the Student tab, in the Student Success box, click the Graduation Information link, or students may contact their counselor or the Graduation Office.

Original certificates are free. Duplicate certificates cost \$5.

## Class Attendance

Class attendance has a direct effect on successful course completion. If students do not attend at least one class meeting during the 100 percent refund period (as indicated on the Important Dates chart), they may be withdrawn from the course with no refund. Students may be administratively withdrawn at any time if they are not actively attending and pursuing course objectives. See "Administrative Withdrawal" on page 230 for more information.

In case of illness or other mitigating circumstances, students should contact instructors. Accommodations such as make-up work may be arranged at the instructor's discretion. Compliancerelated recommendations (Title IX or ADA, for example) may also affect class attendance accommodations. See also "Administrative Withdrawal" on page 230 and www.waubonsee.edu/legal for more information.

## Non-Attendance Due to Military Service

In accordance with Illinois Statute (330 ILCS 60/5.2), a service member enrolled in courses and unable, because of his or her military service, to attend classes on a particular day or days has the right to be excused and to reschedule a course examination administered on the missed day or days. The student and instructor are to determine if the student will be able to successfully complete the course due to missed classes or if the student needs to withdraw due to military service. A copy of military leave orders must be presented to each instructor prior to the student's absence(s). Successful completion of the course(s) remains the sole responsibility of the student. For additional information please visit www.waubonsee.edu/veterans.

If a student's military service requires them to take a leave of absence (more than 30 consecutive days of active duty), the student should withdraw due to active military service. In accordance with the Higher Education Act 2008; Public Law (110-315), the service member is entitled to be re-admitted in the next class or classes in their program after giving notice to re-enroll.

## Class Standings

Class standings are based upon the number of semester hours earned at Waubonsee. A freshman is a student who has earned fewer than 30 semester hours. A sophomore is one who has earned 30 or more semester hours. A student who has earned 65 or more semester hours is considered an unclassified sophomore.

## Credit For Prior Learning

## TRANSFERRING CREDITTO WAUBONSEE: INFORMATION AND REGULATIONS

Credits to be considered for transfer must have been earned at a post-secondary institution accredited by the Higher Learning Commission or other regional accrediting agency with an earned grade of D or better in the course(s) involved. Credits to be considered for ENG 101 or ENG 102 must have an earned grade of C or better if pursuing a transfer degree.

A maximum of 45 semester hours of transfer credit can be applied to a degree. Transfer credit does not apply to the College's academic residency requirement, nor does it count in the grade point average. Credit will not be granted if a student has previously earned credit for an equivalent course at Waubonsee. No recording fee applies.

Transcripts from foreign universities must first be reviewed by a foreign educational credentials services recognized by the National Association of Credential Evaluation Services (NACES).

To learn how to get your credit evaluated by the college, see Admission of Transfer Students on page 228 or visit https://www.waubonsee.edu/transfer-in.

## PRIOR LEARNING ASSESSMENT: INFORMATION AND REGULATIONS

Prior Learning Assessment (PLA) is an academic process of identifying, documenting and awarding college credit for a student's knowledge and skills gained outside of the traditional classroom. Credits earned through PLA may help reduce the time required to earn a degree or certificate.

Prior learning credit may be specific course credit, an elective credit in a specific area or it may be a general elective. Program requirements should be discussed with a counselor or academic advisor to determine how PLA credits will apply toward a degree or certificate.

- Scores of 3 or higher on any of the College Board Advance Placement (AP) examinations will be accepted for college credit to satisfy degree requirements. For specific application of credit, see chart "AP Exams and Course Equivalents."
- Scores of 4 or higher for International Baccalaureate Diploma Programme subjects will be accepted for college credit to satisfy degree requirements.
- Credit by proficiency (noted as an E with 0 Grade Point Level) is awarded and recorded on transcript.
- A maximum of 45 semester hours can be applied to a degree earned by PLA; up to $50 \%$ of the hours required for a Certificate of Achievement.
- Credits earned through PLA do not count toward the College's academic residency requirements.
- Credit will not be granted if a student is currently enrolled in or has previously earned credit for an equivalent course.
- Students should be aware that Credit by Proficiency may not transfer to other colleges and universities.
- Credit will be recorded after the refund period of the student's first semester of enrollment.
- A recording fee of $\$ 10$ per credit hour may be assessed.
- ACE (American Council of Education) CREDIT recommends a credit-granting score of 50 for each CLEP exam. This is a scaled score, equivalent to earning a $C$ in the relevant course.

The Prior Learning Assessment Inventory presents examples of how students can earn credit.

## PRIOR LEARNING ASSESSMENT INVENTORY

\(\left.$$
\begin{array}{|lll|}\hline \text { Method } & \text { Description } & \text { Example(s) } \\
\hline \begin{array}{l}\text { Credit } \\
\text { By Exam (CBE) }\end{array} & \begin{array}{l}\text { Vendor or college } \\
\text { standardized exams } \\
\text { providing students } \\
\text { opportunity to receive } \\
\text { college credit. }\end{array} & \begin{array}{c}\text { - CLEP (College-Level } \\
\text { Examination Program) }\end{array}
$$ <br>
\& - DANTES/DSST <br>

Examination Program\end{array}\right]\)| - ICE (Institutional Credit |
| :--- |
| by Exam) |

## CLEP EXAMS AND COURSE EOUIVALENTS

| Exam Title | Minimum <br> Score <br> Required | Class <br> Credit <br> Granted <br> For | Credits <br> Awarded |
| :--- | :---: | :---: | :---: |
| American <br> Government | 50 | PSC 100 |  |$\quad 3$ 3


| Exam Title | Minimum Score Required | Class <br> Credit <br> Granted For | Credits Awarded |
| :---: | :---: | :---: | :---: |
| Introductory Psychology | 50 | PSY 100 | 3 |
| Introductory <br> Sociology | 50 | SOC 100 | 3 |
| Natural Sciences | 50 | BIO 100, CHM 100, ESC 100, HED 100 (choose 2) | 6 |
| Pre-Calculus | 50 | MTH 129, $\text { MTH } 130$ | 6 |
| Principles of Management | 50 | MGT 200 | 3 |
| Principles of Macroeconomics | 50 | ECN 202 | 3 |
| Principles of Microeconomics | 50 | ECN 201 | 3 |
| Principles of Marketing | 50 | MKT 200 | 3 |
| Social Sciences and History | 50 | HIS 111 , HIS 112, HIS 121, HIS 122, PSY 100, SOC 100 (choose 2) | 6 |
| Spanish Language | 50 | SPN 101 , SPN 102 | 6 |
|  | 63 | SPN 101 , SPN 102, SPN 201, SPN 202 | 12 |
| Western Civilization I | 50 | HIS 111 | 3 |
| Western Civilization II | 50 | HIS 112 | 3 |

## AP EXAMS AND COURSE EOUIVALENTS

| Exam Title | Accepted Score | WCC Equivalent Course(s) | Credits Awarded |
| :---: | :---: | :---: | :---: |
| AP Seminar | 3 | Elective Credit | 3 |
| AP Research | 3 | Elective Credit | 3 |
| Art History | 3 | Elective Credit | 3 |
| Art History | 4 | ART 101, ART 102 | 6 |
| Studio Art Drawing | 3 | Elective Credit | 3 |
| Studio Art Drawing | 4 | ART 120 | 3 |
| Studio Art 2D Design | 3 | Elective Credit | 3 |
| Studio Art 2D Design | 4 | ART 110 | 3 |
| Studio Art 3D Design | 3 | Elective Credit | 3 |
| Studio Art 3D Design | 4 | ART 111 | 3 |
| Biology | 3 | BIO 100 | 3 |
|  | 4 | BIO 100, BIO 120 | 7 |
| Calculus AB | 3 | MTH 131 | 4 |
| Calculus BC | 2 | MTH 131 | 4 |
|  | 4 | MTH 131 , <br> MTH 132 | 8 |
| Chemistry | 3 | CHM 121 <br> CHM 121, <br> CHM 122 | 4 |
|  | 4 |  | 8 |
| Chinese Language \& Culture | 3 | CHN 101 CHN 102 | 6 |
|  | 4 | CHN 101. <br> CHN 102 <br> Elective Credit | 12 |
| Computer Science A | 3 | CIS 115 | 3 |
| Computer Science Principles | 3 | CIS Elective | 3 |
| Economics-Macro | 3 | ECN 202 | 3 |
| Economics-Micro | 3 | ECN 201 | 3 |
| English Language and Composition | 3 | ENG 101 | 3 |
| English Language and Composition | 4 | ENG 101, ENG 102 | 6 |
| English Literature and Composition | 3 | ENG 101 | 3 |
| English Literature and Composition | 4 | ENG 101, ENG 102 | 6 |
| Environmental Science | 3 | GEO 240 | 3 |
| French Language \& Culture | 3 | FRE 101, FRE 102 | 6 |
|  | 4 | FRE 101, FRE 102, FRE 201, FRE 202 | 12 |
| German Language \& Culture | 3 | GER 101. GER 102 | 6 |
|  | 4 | GER 101, <br> GER 102, <br> GER 201, <br> GER 202 | 12 |
| Government \& Politics: Comparative | 3 | PSC 220 | 3 |


| Exam Title | Accepted <br> Score | WCC <br> Equivalent <br> Course(s) | Credits <br> Awarded |
| :---: | :---: | :---: | :---: |
| Government <br> \& Politics: US | 3 | PSC 100 | 3 |
| History-European | 3 | HIS 111, HIS 112 | 6 |
| History-US | 3 | HIS 121, HIS 122 | 6 |
| History-World | 3 | HIS 101, HIS 102 | 6 |
| Human Geography <br> Japanese | 3 | GEO 235 | 3 |
| Latin | 3 | JPN 101, JPN 102 | 6 |
| Music Theory | 3 | Elective Credit | 6 |
| Physics 1 | 3 | Elective Credit | 12 |
| Physics 2 | 3 | MUS 121 | 3 |
| Physics C: Electricity <br> and Magnetism | 3 | PHY 111 | 4 |
| Physics C: <br> Mechanics | 3 | PHY 112 222 | 4 |
| Psychology | 3 | PHY 221 | 5 |
| Spanish <br> Language \& Culture | 3 | PSY 100 | 5 |
| SPN 101, SPN 102 | 6 |  |  |
| Spanish Literature |  |  |  |
| and Culture |  |  |  |

## Dean's List

Students who achieve a 3.50 to 3.99 semester grade point average while enrolled in six or more regular semester credit hours are honored by placement on the Dean's List (fall, spring and summer semesters). Also see President's List.

## President's List

Students who achieve a 4.00 semester grade point average while enrolled in six or more regular semester credit hours are honored by placement on the President's List (fall, spring and summer semesters).

## Academic Load

Full-time students: Students enrolled in 12 semester hours or more during the fall, spring or summer terms shall be considered full-time. The maximum academic load for fall and spring terms is 18 semester hours and 12 semester hours for the summer term. Students wishing to exceed these hours must complete a "Overload Permission Request" form. Please allow time to meet enrollment deadlines as this process may take up to 10 days. Forms are available in the Counseling, Advising and Transfer Center.

Part-time students: Students enrolled in less than 12 semester hours during the fall, spring or summer terms shall be considered part-time. Students enrolled in less than six (6) semester hours during any term shall be considered less than half-time.

## Grading

Grade points are numerical values that indicate the scholarship level of letter grades.

Grade points at Waubonsee are assigned on the following scale:

| Grade | Significance | Grade-Point Level |
| :---: | :--- | :---: |
| A | superior | 4.00 |
| B | good | 3.00 |
| C | average | 2.00 |
| D | poor | 1.00 |
| F | failure | 0 |
| W | withdrew | 0 |
| I | incomplete | 0 |
| E | credit by proficiency | 0 |
| Z | audit | 0 |
| Y | successful completion |  |
|  | of a continuing |  |
|  | education course | 0 |
| N | unsuccessful completion of a |  |
|  | of a continuing education course | 0 |
| MG | missing grade | 0 |
| NC | noncredit course | 0 |
| (H) | honors course notation | see grade |
| (G) | grade forgiveness not |  |
|  | included in GPA | 0 |
| (T) | transfer course | 0 |

Repeated courses are marked with a notation.

Grade points earned for a given course are determined by multiplying the semester hours earned for the course by the grade point level achieved.

For example: If a B (3.00 grade point level) was earned in a 3 -semester-hour history course, the number of grade points earned would be a $3.00 \times 3$ which results in nine grade points. On the other hand, if a D (1.00 grade-point level) was earned in a 4 -semester-hour biology course, the number of grade points earned would be $1.00 \times 4$ or four grade points. Only grades A, B, C , and D are used in calculating grade points.

## Notification of Grades

Final course grades are recorded at the end of each semester. Students can access their official final grades through the mywcc Web portal.

## INCOMPLETE GRADES

A grade of I signifies incomplete coursework and is assigned at the discretion of the instructor when illness or other unusual circumstances prevent a student from completing course requirements by the end of the term. A grade of I may not be assigned as a final grade unless a signed, completed Agreement for Incomplete Coursework is submitted to the appropriate Dean's office by the instructor no later than the Friday prior to the deadline to submit grades. The intent of the agreement is to:

- establish course components required to be completed by the student;
- establish a timeframe for completion of required course components-must be no later than the end of the next full 16week semester;
- establish a grade for the student in the event that required course components are not completed.

In the event that a faculty member is unable to meet the terms of the Agreement, the grade agreed to in the Agreement will be assigned by the appropriate Dean. This definition does not allow for regular letter grades (A, B, C, D, F or W) to be changed to an I grade after final grades are assigned. Special exceptions may be presented to the Vice President of Educational Affairs for consideration.

## GRADES IN REPEATED COURSES

If a regular semester credit course is repeated, only the higher grade is used to calculate the grade point average.

However, certain courses are designed to be repeatable. Examples include applied music and physical education courses. All grades in these repeatable courses are used to calculate the grade point average.

For these courses that are designed to be repeatable, it is necessary to complete a "Repeatable Course Grade Change Request" form if the student wishes to have only the higher grade(s) calculated in their GPA. Request forms are available online in the mywcc portal.

## GRADE CHANGE PROCESS

Requests for a change in a final grade must be submitted to the instructor within one calendar year of the date the final grade was officially due to Registration and Records. Please refer to the official academic calendar for the appropriate grade due dates.

No grade change may be processed after one calendar year. Regular letter grades (A, B, C, D, or F) cannot be changed to an I or a W grade after final grades are assigned. The definition of the W does not permit it to be changed to an A, B, C, D, F or I after final grades have been assigned. An I grade can only be changed to an A, B, C, D or F grade.

Special exceptions may be presented to the Vice President of Educational Affairs for consideration. Refer to the "Student Handbook" for more details on grading and the change and appeal processes.

## GRADE APPEAL PROCESS

In situations where the student is not satisfied with the outcome of the grade process, and in accordance with students' rights for due process, the student may appeal a final grade in a course. The student must initiate the appeal process within one calendar year of the date the final grade was officially due to Registration and Records. Guidelines and procedures are outlined in the Student Handbook or available from the office of the Vice President of Student Development (see directory).

## GRADE FORGIVENESS PROCEDURE

This procedure provides the student with a second chance. A student may apply for forgiveness of grades of D or F earned in courses taken previously at Waubonsee. To be eligible to apply for
grade forgiveness, a student must meet the following two conditions:

- The student cannot have attended Waubonsee Community College or any other post-secondary school for a consecutive period of at least 18 calendar months between the dates of enrollment at Waubonsee, and
- The student must have completed a minimum of 15 semester hours with a grade point average of 2.0 or better at Waubonsee Community College since the re-enrollment after the 18-month out-of-school period.

Courses approved for grade forgiveness are listed with a special notation (G) on the student transcript and are not included in the calculation of the student's GPA. The "Request for Grade Forgiveness" form is available in the mywcc portal.

## Graduation Academic Honors

All students graduating from Waubonsee who have achieved a cumulative 3.50 to 3.99 grade point average in all semester hours attempted at Waubonsee are designated for graduation honors. Those students who earn a 4.00 cumulative grade point average are recognized with presidential honors.

## Graduation/ Commencement Ceremonies

Students who earn degrees from Waubonsee are recognized annually during public commencement ceremonies conducted at the end of the spring semester. All students who completed graduation requirements during the previous fall semester (December) and/or will complete during the spring (May) or summer (August) semester are encouraged to participate.

Students who decide to participate in the commencement ceremony are notified of the cap and gown purchase fees during the spring semester (March). May and August graduation candidates must apply for graduation no later than Feb. 15 to be included in the annual Graduation Ceremonies.

All students who complete graduation requirements are issued a diploma free of charge. Duplicate diplomas are issued at a cost of $\$ 25$. Contact the Graduation Office for duplicate ordering information.

## Graduation Requirements

The general procedures for graduation are outlined below. Course requirements and other regulations for each degree and major are explained in the program section of this catalog.

1. Counseling, Advising and Transfer Center: Students working toward their associate degree should meet early and often with a counselor or academic advisor to plan their program of study and to ensure they meet all requirements to graduate.
2. Curriculum: Students need to know and observe the requirements of their curriculum and the rules governing academic work. While counselors can help students make wise decisions, the ultimate responsibility for meeting the requirements to graduate rests with each student.

Although academic requirements may change with each edition of the college catalog, students are responsible for the certificate or degree requirements that are specified in the official college catalog at the time the student completes his/her first credit course. A student may elect to follow the certificate or degree requirements set forth in any subsequent catalog if the student completes a credit course during that catalog's effective dates. Requirements may not be combined from different catalogs. No student may graduate using the requirements of a Waubonsee Community College catalog that is more than five years old prior to the date of graduation.

In the case of curriculum changes and the cancellation or withdrawal of courses, every effort will be made to substitute current coursework to fulfill certificate or degree requirements. Course substitutions must be approved in writing by the appropriate Dean. The student has the ultimate responsibility to fulfill the requirements for the certificate or degree, to check the eligibility to take courses and to observe the academic rules governing the program. A degree or certificate cannot be awarded if the program has been withdrawn.

The rules given apply only to requirements for certificates and degrees. All students are subject to the academic regulations stated in the most recent catalog.
3. Transfer Credit: If a student completes any courses (including final ones) from another college to be used toward degree or certificate requirements, he/she must submit offiicial transcripts as soon as possible, submit a Transcript Evaluation Request Form and notify the Graduation Office.
4. Degree Audit: Students can track their progress toward a certificate or degree by using the "Degree Audit" tool in mywcc, on the Student tab, in the Student Success box, click the My Degree Audit link. The Degree Audit is an unofficial evaluation. The report should be reviewed with a Waubonsee counselor or academic advisor for accuracy and additional information.
5. Timing: Graduation requirements may be completed during any semester; however, if students cannot complete their program as petitioned, they should notify the Graduation Office immediately.
6. Apply for Graduation: Intent to Graduate forms should be submitted early in the semester before the student expects to complete their degree and/or certificate to ensure they will meet all the requirements to graduate. Intent to Graduate forms can be found at mywcc, on the Student tab, in the Student Success box, click the Graduation Information link; or students may contact their counselor or the Graduation Office.

## Career and Technical

 Education GuaranteeWaubonsee Community College, as an expression of confidence in its faculty, staff and educational programs, guarantees the skills of all occupational Associate in Applied Science degree and certificate graduates.

Refer to the "Career and Technical Education" section of this catalog for details on the terms of this guarantee.

See also "Transfer Program Guarantee" later in this section.

## Probation, Academic

All students who earn a cumulative grade point average below 2.0 are automatically placed on academic probation. Students remain on probation until their cumulative grade point average is equal to 2.0 or higher. There are three progressive stages of academic probation: (1) academic caution (2) academic warning and (3) academic restriction. A registration hold is placed at each stage until the student completes the prescribed intervention. Students avoid progressing to the next stage of academic probation if they earn a semester GPA of 2.0 or above. See the Student Success portlet in mywcc for details.

## Rights and Responsibilities

Waubonsee Community College recognizes that students are both citizens and members of an academic community. As a citizen, each student has the freedoms of speech, assembly, association, and the press, and the rights of petition and due process which are guaranteed by the state and federal constitutions. As members of an academic community, students have the right and the responsibility to participate, through student government and college committees, in the development and review of college regulations and policies affecting them.

Upon enrolling in the college, each student assumes an obligation to conduct himself or herself in a manner that is compatible with the college's function as an educational institution. If this obligation is neglected or ignored by the student, the college must, in the interest of fulfilling its function and meeting its total obligations, institute appropriate disciplinary action as described in the student conduct section of the "Student Handbook."

## FINANCIAL OBLIGATION OF THE STUDENT

Final grades are not released for the student whose financial account with Waubonsee has not been settled in full. Likewise, no diploma, professional certificate, academic transcript or other information concerning academic record is released until the student's account has been cleared.

## MILITARY RECRUITING

Waubonsee Community College is in compliance with the Solomon Amendment (32 CFR, Part 216 by the Department of Defense) of the National Defense Authorization Act. This amendment gives branches of the military access to student recruiting information (as defined by the Department of Defense in the October 23, 1998 Final Regulations) for student recruiting purposes. Contact Registration and Records for additional information (see directory).

## PRIVACY OF RECORDS

All information provided to Waubonsee Community College is kept confidential in accordance with the Family Educational Rights and Privacy Act ( FERPA) of 1974 (Public Law 93-380).

In accordance with FERPA, the following student rights are covered by the act and afforded to all students at Waubonsee:

- Inspect and review their educational records;
- Request the amendment of inaccurate or misleading records;
- Consent to disclosure of personally identifiable information contained in their educational record;
- Request confidentiality, and;
- File a complaint with the U.S. Department of Education concerning alleged failures by Waubonsee Community College to comply with this law.

At the College's discretion, directory information may be provided in accordance with the provisions of the act without the written consent of the student unless the student requests in writing that such information not be disclosed. The items listed below are designated as directory information and may be released for any purpose at the discretion of Waubonsee Community College unless a request for non-disclosure is on file.

- student's name
- city of residence
- major field of study
- email address
- participation in officially recognized activities and sports
- weight and height of members of athletic teams
- dates of attendance (and withdrawal)
- full- or part-time status
- degrees, certificates and awards received

Contact the Registration and Records office for any questions concerning the student's rights and responsibilities under the Family Educational Rights and Privacy Act or visit www. waubonsee.edu/ferpa.

## TRANSCRIPTS

All students desiring their academic transcript to be sent to another institution, prospective employer, etc., should submit a request to Registration and Records. Transcripts requested in person, by mail or by fax will be $\$ 10$ each while transcripts requested online will be $\$ 5$ each. Unofficial transcripts are available for free via mywcc. The Transcript Request form is available at www.waubonsee.edu/transcript, or can be requested online via mywcc or at www.getmytranscript.com.

## Transfer Program Guarantee

The Transfer Program Guarantee formally assures students that certain courses transfer to Illinois four-year state universities. The college backs up the guarantee with a tuition refund if those specified courses do not transfer.
Refer to the "Transfer Degrees Program" section in this catalog for more details.

## Co-Curricular Transcripts

This official document records a student's co-curricular including athletics, student organizations and awards. Students may view and print their co-curricular transcripts through the mywcc portal. Co-curricular transcripts are updated each semester. Contact the Student Life Office for more information at ext. 2369 or email studentlife@waubonsee.edu.

## Resources and Services

## Resources and Services

Many resources and services are available to students at Waubonsee. They include everything from academic advising to intercollegiate athletics, from child care to a state-of-the-art computing center. This alphabetically organized section describes these many resources and services. Students should also have a copy of the current "Student Handbook" (published annually) that serves as a handy reference for each academic year.

## Academic Counseling and Advising

Waubonsee's academic advising program provides opportunities for students, instructors and counselors to review academic progress. Assessment testing, E-RAP (Electronic Registration and Planning), and a variety of academic support services are available. See also the section on Counseling.

Phases of the academic advising process include the following:

## ACADEMIC EARLY ALERT

Waubonsee's Early Alert has been developed with the goal of increasing student success. Under this program, instructors are asked to identify students who exhibit academic difficulties that may prevent them from completing a course successfully. Areas of difficulty can include attendance, English proficiency, academic preparation/prerequisites, class participation, test/quiz scores, completion of class assignments, clinical/lab assignments and appropriate classroom behavior.

Students identified with academic difficulties are encouraged to meet with their instructor and make an appointment with a counselor to address the areas of concern and develop a strategy for success.

## PROGRAM REVIEW

Upon cumulative enrollment in 24-38 semester hours, students receive a letter of notification and are required to review their progress with a counselor. The program review helps students remain focused on their chosen academic goals, whether they be career transfer focused. Program reviews are mandatory and required before students are permitted to register for the next semester.

## Access Center for Disability Resources

The Access Center for Disability Resources makes educational opportunities accessible through individualized academic accommodations and other services for students with disabilities. Any student with a disability may meet with the Access Center to determine eligibility for academic accommodations.

Accommodations include but are not limited to:

- sign language interpreters;
- readers or audio for exams and quizzes;
- scribe or writing service;
- assistive technology;
- alternative text formats;
- extended time for exams;
- alternative site for exams;
- counseling and coaching.

For more information please contact the Access Center (see directory).

## Adult Education Special Programs

This comprehensive program offers opportunities for low-income adult education students to obtain self-sufficiency through education and training. These programs are designed to offer personalized assistance to the potential college student who plans to pursue a certificate or associate degree in a vocational area.

The Youth Services Program (YSP) offers career exploration and job search/placement in the area of health care to students between the ages of 16 and 24 . Among the many benefits available to eligible students are free tuition and fees, books, individual case management and other support services. Students lacking a high school diploma are strongly encouraged to attend high school equivalency (HSE) classes to work toward HSE attainment prior to enrolling in a certificate program. One-year follow-up is given to students once they have completed their course of study or obtained employment.

For more information or to register, contact the Adult Education Special Programs office (see directory).

See directory inside back cover.

## Bookstore

Waubonsee's bookstores are open year-round and are located in Dickson Center on the Sugar Grove Campus and on the first floor of the Aurora Downtown Campus at the Galena Boulevard entrance.

Textbooks for classes may be purchased by visiting the Waubonsee Bookstore at either the Sugar Grove or Aurora Downtown Campus, or by ordering online at www.waubonsee.edu/bookstore. The bookstores accept cash, checks (with proper ID), and credit card (VISA, MasterCard, Discover, American Express). Financial aid can be used on approved purchases through the use of a book voucher. Date restrictions apply and are posted each term. The Financial Aid Office awards and approves financial aid.

Bookstore vouchers may be available for grants, scholarships, loans and other financial aid. Bookstore vouchers are automatically issued based on current enrollment to grant and/ or loan recipients that have financial aid in excess of their current charges. See the Financial Aid Handbook for book voucher maximum amounts. Contact the Financial Aid office about bookstore vouchers for other programs.

Students are able to purchase course materials (including textbooks) in new, used, rental, and e-book formats (based on availability). Please note that a major credit card is required for all rental agreements. All online orders can be picked up at any of the college's four campuses at no cost or shipped directly to students for a fee. A restocking fee will be charged for online orders canceled or changed after the order has been filled.

The bookstores also stock reference materials, study guides, school and office supplies, electronics (including laptops and tablets), gift items and Waubonsee insignia clothing and gifts. Educationally priced computer software is available to students.

Students are able to sell their textbooks to the bookstore at designated times throughout the year. The bookstore pays the highest price possible for books being used again in future terms. Textbooks not being used again on campus may be purchased based on national supply and demand. Textbooks must be returned clean and complete.

Regular bookstore hours, along with extended hours at the beginning of each term, are posted at each location and on the bookstore website.

## Career Choices

## CAREER EXPLORATION

Both currently enrolled students and members of the community are welcome to use the resources of the Counseling, Advising and Transfer Center for career exploration.

Career inventories such as the Strong Interest Inventory, Campbell Interest and Skill Survey, and the Myers Briggs Type Indicator are used to examine a person's interests and personality in relation to occupations. A nominal fee is charged to cover the cost of some materials.

Counselors are available to meet with students and community members to discuss their career options and goals.

College Success Topics (COL) 131 is a one credit course that allows students to explore careers that would fit their interest and talents. Check the semester schedule of classes for times and locations.

## CAREER DEVELOPMENT CENTER

Students and college district members seeking full or part-time employment, as well as employers looking for quality employees, can take advantage of a wide range of free services offered by the Career Development Center.

Resources available in the Career Development Center to assist in the job search process include information on employment projections and labor market needs, effective résumé writing and interview techniques, internship opportunities, and additional employment strategies. In addition to meeting with Career Development Center staff, students are encouraged to visit the student success portlet in the mywcc, for online services.

The website www.collegecentral.com/waubonsee is an Internetbased job listing service for community college students and district residents. Employers throughout the greater Chicagoland region can contact Waubonsee to list their job opportunities. Job seekers can post their résumés and view postings. The website provides universal access 24 hours a day, seven days a week, to the thousands of jobs listed annually through the Career Development Center.

Students may also pursue Internship and Study Abroad opportunities with Career Development Center staff. See pages 14-15 for more information. Employers may choose to participate in career fairs, recruit or provide work site experiences that coordinate with a student's academic program.

## (7) See directory inside back cover.

## Learning Assessment and Testing Services

Learning Assessment and Testing Services is committed to facilitating student learning at Waubonsee Community College by offering a wide range of testing services to students and members of the community.

Learning Assessment and Testing Services assists Waubonsee students throughout every phase of their college career. Assistance begins with placement testing for new full-time students, continues with online testing, and includes program admission testing. Learning Assessment and Testing Services also assists faculty by providing a place for students to take make-up exams.

Community members can take advantage of the testing administered through several programs, including High School Equivalency (HSE), College Level Examination Proficiency (CLEP) and certification tests given throughout the year.

For additional information, contact the Learning Assessment and Testing Services office (see directory).

## Class Offerings

Every semester, class schedules are published for college credit courses, community education classes, workforce development and programs for youth. Credit and noncredit schedules are mailed to every district resident. For additional copies of any of these publications, call the Marketing and Communications office (see directory).

In addition, the credit and noncredit course schedules are available in searchable form online at www.waubonsee.edu.

## Conduct and Grade Concerns

Waubonsee Community College has procedures to assist students in resolving college-related grievances. Specifically, the procedures address student grade concerns and student conduct.

Waubonsee Community College is committed to prohibiting any forms of discrimination. See the section "Federal Compliances."

Nothing in these procedures limits a student's right to submit a complaint against the college to the Department of Education Office for Civil Rights. These procedures are not intended to supersede other existing college policies and procedures.

Procedures for grade concerns and student conduct are detailed in the "Student Handbook."

For more information about these procedures, please contact the Dean for Students (see directory).

## Connect4Success (C4S)

Connect4Success is a federally-funded Title V Grant program that provides free one-on-one success coaching for students who need personalized follow-up and academic support. Students are paired with professional staff members (Student Success Coaches) who engage with students through text, phone, in person, and through e-mail to help students reach their goals. Services for eligible students include support and guidance with motivational coaching, study skills, time management, financial literacy, and connection to campus and community resources. For more information on eligibility and availability of services, contact Connect4Success (see directory) or visit www.waubonsee.edu/c4s.

## Counseling, Advising and Transfer Center

Waubonsee Community College provides a wide range of academic, personal, and career counseling. Counselors assist students with issues such as career and educational goals, choosing programs of study, lifestyle transitions related to education, and other personal issues that may interfere with academic progress. Transfer planning for four-year universities is also offered.

See also the section on "Academic Counseling and Advising."
Counselors are available at all Waubonsee campuses. Walk-in and appointment times are available. Call for office hours or appointments (see directory) or visit www.waubonsee.edu/ counseling or the student success portal of mywcc.

## ELECTRONIC REGISTRATION AND PLANNING (E-RAP) FOR FULL-TIME AND/OR DEGREE-SEEKING STUDENTS

New first-time, full-time students must complete an Electronic Registration and Planning (E-RAP) tutorial before registering for courses. The tutorial explains Waubonsee's degree and certificate programs and teaches students how to use the college catalog, credit schedule and test scores to select courses. Students then register and pay for their first semester of courses online.

Students can access E-RAP through the mywcc portal at mywcc. waubonsee.edu. An X-number is needed to login.

## CONTINUED COUNSELING

Currently enrolled students are encouraged to meet periodically with a counselor to discuss career plans and academic progress. Students should confer with a counselor or advisor when changing a schedule or withdrawing from classes or the college.

## Developmental Education and College Readiness

This division provides students with needed resources to help them achieve success at Waubonsee, including tutoring and assistance in reading, writing, mathematics and study skills.

## Foundation

The Waubonsee Community College Foundation supports the philosophy and purpose of Waubonsee with the following goals:

- to continue funding existing scholarship programs and initiate new ones;
- to advance the educational and charitable purposes of the college.

The Foundation awards more than 250 scholarships each academic year. Applications are available in the fall and are due in each February for the following academic year. Applications available fall 2017 and due in February 2018 will be for scholarships awarded for the 2018-2019 academic year. More information may be found at www.waubonsee.edu/foundation.

Chartered in 1978 as a tax exempt, non-profit organization, the foundation is governed by a 25 -member board of community leaders. Contact the Advancement Office (see directory).

## Information Technology (IT) Services

IT Services supports technology needs and provides the following services:

- Information security
- Internet access
- Student email (google mail)
- Student portal access


## TECHNICAL ASSISTANCE CENTER (TAC)

TAC provides Waubonsee students technology support when accessing their student records through the student portal, connecting to the Internet while on campus and using student email. TAC is located in Dickson Center, Room 121 and can be contacted at (630) 466-HELP (4357).

## HENNING ACADEMIC COMPUTING CENTER

The Henning Academic Computing Center provides Waubonsee students and area residents with opportunities to use computers and numerous types of software in an academic laboratory featuring the latest instructional technology. The 15,000 squarefoot facility has eight classrooms and an open lab equipped with 120 computer work stations. All personal computers in the center are networked to provide access to a wide range of software packages as well as laser printers. One of the classrooms is equipped as a computer aided drafting and design laboratory. All classrooms are equipped with LanSchool software, enabling an instructor to demonstrate on each student's computer and simultaneously monitor the individual screens.

All currently enrolled Waubonsee Community College students have access to the open lab. The Henning Academic Computing Center is open extended hours when classes are in session. Verify posted hours in a current semester course schedule.

Network User Rules are in effect at Waubonsee to ensure fair, equitable and appropriate electronic communication. All users (whether on campus or accessing Waubonsee's network from offsite) are bound by these rules. The rules are available online and are included in the "Student Handbook."

## Intercollegiate Athletics

Waubonsee competes in intercollegiate sports and is a member of the Illinois Skyway Collegiate Conference and the National Junior College Athletic Association. Authorized sports include baseball, golf, softball, volleyball, soccer, tennis, basketball and cross-country. In addition, the college offers co-ed cheerleading.

To be eligible for any intercollegiate sport, a student must be a regular student enrolled in a minimum of 12 semester hours and must meet the eligibility requirements of the National Junior College Athletic Association (NJCAA). For more information, visit www.njcaa.org.

## Internship/Externship Program

Internships enable students to acquire professional work experience, establish references and begin a career. Students with a faculty advisor's consent can also earn up to three semester hours per term. Students are encouraged to research internship opportunities and the Career Development Center is available to assist. Please contact careerdevelopment@waubonsee.edu or the Dean for the appropriate instructional division for more information.

## Library Services

Library services are accessible through the Library website, as well as all campus locations (Sugar Grove, Aurora Downtown, Aurora Fox Valley and Plano). The Todd Library at the Sugar Grove Campus, the Aurora Fox Valley Campus Library and the Aurora Downtown Campus Library provide book, periodical, faculty reserves, and multimedia collections. Students on any campus have access to materials and services located on other campuses. Electronic collections including academic databases and e-books chosen to support the college curriculum provide research materials for students and residents of the Waubonsee Community College district and are available through the Library website at all campuses and off campus. Circulation services are available for registered Waubonsee students, faculty, staff, and residents of Waubonsee Community College District 516 high school age or older. Amenities and services specific to the Aurora Downtown, Aurora Fox Valley and Sugar Grove library facilities include:

- Copier
- Study room
- Instructional multimedia
- Reference assistance
- Faculty reserves
- Multimedia viewing area
- Instruction classroom


## Music Performance

Students may participate in music performances by enrolling in credit courses (see Applied Music in course descriptions) or by participating in an instrumental or vocal ensemble with other community members. Contact the Dean of Communications, Humanities and Fine Arts.

## INSTRUMENTAL MUSIC

Waubonsee offers students the opportunity to perform in ensembles including the Jazz Band, Concert Band, Guitar Ensemble, Rock Band, Percussion Ensemble and Steel Band. The ensembles are open to all interested students for credit and noncredit. Students can also gain concert band experience through a cooperative agreement with the Fox Valley Concert Band.

## VOCAL MUSIC

Waubonsee offers three opportunities to participate in vocal groups: the Waubonsee Chorale, a 30 -member group that performs traditional choral music; the Chamber Choir, an auditioned group of contemporary singers who perform part songs and madrigal style music; and the Fox Valley Festival Chorus, a 60-member ensemble performing larger choral works, often with an instrumental group.

## mywcc Web Portal

Students can access all of their important Waubonsee information in this portal at mywcc.waubonsee.edu. Once they sign in with their X-number and password, they'll find everything from their email to their course schedule to their final grades. mywcc also features such helpful tools as a degree audit and a student success portlet.

## Returning Adult College Students

Waubonsee provides an admissions advisor who can assist adult (non-traditional) students in all aspects of the registration process and address issues that concern the adult student population of Waubonsee.

## S.T.A.R. Program (Student-Athletes Taking Academic Responsibility)

The Waubonsee Community College S.T.A.R. (Student-Athletes Taking Academic Responsibility) Program was created in 1991 to further the academic progress of student-athletes while they participate in athletics. The program includes weekly study sessions; personal, career and academic counseling; academic monitoring; and nominations for various scholarships and academic recognition.

## Student Life

Co-curricular activities are a vital part of a student's education. Involvement allows students to meet people with similar interests, develop transferable skills, network, résumé build, and have a good time. For more information contact the Student Life office or check the Waubonsee Student Life page on Facebook or Twitter at @WaubonseeLife. Student Life events are listed on the student calendar in mywcc.

## Student Organizations

Waubonsee Community College has a variety of student organizations to meet students' needs. All groups are student initiated and run. Student groups range from social to cultural, academic to honor societies, and political to religious. Check the Student Life website or the Student Handbook for a full listing. Involvement Fairs are held each semester to allow student organizations to connect with potential members. Contact the Student Life office for meeting information.

## STUDENT SENATE

Student Senate provides a channel of communication through which the administration, faculty and students may plan and discuss topics affecting the student body. All meetings are open and students are invited to attend.

The senate is composed of 12 students elected from the student body. The Student Senate charters student organizations, represents the student body on college committees and implements projects to meet student's needs.

Elections are hosted in the spring semester for the following year. Any registered student may vote in a student government election. Candidate requirements, petitions and details are available from the Student Life office.

## STUDENTTRUSTEE

The student member of the Waubonsee Community College Board of Trustees is elected during the spring student government election and serves for one year. The student trustee attends all board meetings representing the interests of Waubonsee students. The current student trustee can be contacted through the Student Life office.

## INTRAMURALS

Waubonsee Community College maintains a program of intramural athletics for those not wishing to compete in an intercollegiate sport. The offering of intramural activities is based upon student interest and participation. Contact the Athletics office for the most current information (see directory).

## Transfer Advising

Transfer advising is available as part of the Counseling, Advising and Transfer Center. Assistance is available to students who plan to transfer to a four-year school upon completing Waubonsee's associate degree. Counseling maintains transfer/articulation fact sheets for the state universities (and many private four-year colleges) that explain the exact courses that transfer to each institution. Also see www.waubonsee.edu/transferring for more information.

## TRIO/Student Support Services

TRIO/Student Support Services provides educational support services for eligible Waubonsee Community College students. The program helps students successfully complete their college degree or certificate programs. First-generation college students, students who need financial assistance, or students who have a disability and demonstrate a need for academic support may qualify. Services include study tables, small group and limited individual tutoring; academic, career, transfer and personal counseling; financial aid guidance; cultural enrichment activities; and workshops on a variety of topics. For more information on eligibility and availability of services, contact the TRIO/Student Support Services office (see directory) or visit www.waubonsee.edu/sss

## Tutoring

The college offers free face-to-face and online tutoring for credit students in a variety of subject areas, such as writing, mathematics, science, social science and humanities. The Tutoring Center also provides specialists who help students with reading textbooks effectively, preparing for tests, developing career vocabulary, and developing or enhancing study skills. Schedules can be found on mywcc or by contacting Tutoring at the Sugar Grove or Aurora Downtown Campuses (see directory).

## Veteran Student Services

Waubonsee is proud to serve those students who have served our country. Visit www.waubonsee.edu/veterans for information about getting started, academic advising and financial aid.

## History and New Directions

Waubonsee Community College, a two-year public institution of higher learning, came into existence in August 1966 when the electorate of 12 school districts in most of Kane and portions of Kendall, DeKalb, LaSalle and Will counties voted to establish Community College District 516. Today, the district encompasses more than 600 square miles and has an assessed valuation of approximately $\$ 8.4$ billion.

From the beginning, the college's philosophy has been that education is the cornerstone of a literate, democratic society; learning is a lifelong process; and the pursuit of knowledge must be supported by institutional policies demonstrating accessibility, service, quality, innovation and value.

With the objective of meeting the lifelong learning needs of the community, the college truly began taking shape in early 1967, as the college's first president assumed his duties and subsequently began assembling a staff, developing a multilevel curriculum and locating classroom space. However, the college still needed a name, and for that, the school called upon its community.

A district-wide naming contest was held in March of 1967. From among the 600 entries, the name suggested by both Susan Miller, of Aurora, and Patricia Ann Dillon, of Batavia, stood out, and the Fox Valley's community college officially became Waubonsee Community College. Waubonsee, meaning "early dawn" or "early day," was a Pottawatomie Native American chief who lived in the Fox River Valley during the 1800s.

Waubonsee Community College had a permanent name but had yet to locate to a permanent campus and so, when the college opened its doors for classes on September 11, 1967, the doors were those of a variety of community facilities. The school's initial enrollment of 1,603 students - 403 full-time and 1,200 part-time - has grown steadily since that time, with the college currently serving more than 12,000 students each semester.

Just a few months later, in December 1967, a successful bond referendum allowed the college to begin planning its first permanent campus. The campus, situated on a 243 -acre tract of land north of Sugar Grove on Route 47, still serves as the college's main campus. In addition to classroom space, facilities there also include conference rooms, specialized laboratories, Student Center, café and coffee shop, library, bookstore, observatory, kiln shelter, 375 -seat auditorium, multipurpose event space, gymnasium, 120-workstation computer center, fitness center and two-mile nature trail.

A second Waubonsee campus opened in 1986 in downtown Aurora at the corner of Galena Boulevard and Stolp Avenue, but this structure ceased operations in May 2011. In June 2011, Waubonsee moved its downtown campus to a new 132,000 square-foot facility at 18 South River Street. The Aurora Downtown Campus remains the headquarters for Workforce Development, Adult Education, High School Equivalency, English as a Second Language and the Adult Literacy Project.

Waubonsee established another major extension center in January 1997 on the Rush-Copley Medical Center campus, adjacent to Route 34 in far east Aurora. Renovated and renamed the Aurora Fox Valley Campus in 2016, it now houses the college's health care programs, in addition to offering general education courses and comprehensive student services.

Spring 2011 marked the beginning of courses at the college's fourth permanent campus, located in Plano. Situated on a nineacre site adjacent to the Lakewood Springs development, north of Highway 34 and west of Eldamain Road near Lake Plano, the Plano Campus offers transfer center and complete career degree and certificate programs to area residents, along with noncredit learning opportunities.

The new Aurora Downtown and Plano Campuses were among the many projects undertaken as part of the 2020 College Master Plan. During the 2002-2003 academic year, the board of trustees adopted this plan, which outlined educational facilities necessary to meet the needs of students then and into the future. Five building projects were completed at the Sugar Grove Campus; the Campus Operations facility opened in August 2005, the new Science Building opened during the fall 2006 semester, the Academic and Professional Center held classes for the first time in fall 2007, the Student Center opened in spring 2009, and the Field House opened in spring 2015.

While Waubonsee is continually working to improve its campuses, the college also recognizes the need for other convenient course locations, and so classes are held at nearly 16 other extension sites throughout the district as well. For those students who prefer to learn from home, Waubonsee offers online learning options. Waubonsee has always been a leader in distance learning, from being a founding member of the Illinois Virtual Campus (IVC) to providing courses to students statewide through Illinois Community Colleges Online (ILCCO). Currently, the college offers nearly 200 online courses and delivers fully-accredited associate degrees and certificates to students in an online format.

As the educational needs of its district change, so too will Waubonsee Community College. What will always remain the same, however, is Waubonsee's commitment to student success through quality teaching and learning experiences.

## Federal Compliances

Waubonsee Community College does not discriminate in employment or educational opportunities, including career and technical educational opportunities, on the basis of race, color, religion, gender, sexual orientation, age, national origin, veteran's status, marital status, disability or any other characteristic protected by law in its programs and activities. The college will take steps to assure that the lack of English-language proficiency will not be a barrier to admission and participation in career and technical education (CTE) programs. CTE courses/program offerings and admission criteria are on the college's website at www.waubonsee.edu.

For more information on the college's nondiscrimination policies, contact Michele Needham, Executive Director of Human Resources and Affirmative Action Officer, Title IX Coordinator and Section 504/ADA Coordinator, at (630) 466-7900, ext. 2367 or mneedham@waubonsee.edu; Waubonsee Community College, Route 47 at Waubonsee Drive, Sugar Grove, IL 60554-9454.

## Title VII of the

Civil Rights Act of 1964
Waubonsee Community College is in compliance with Title VII of the Civil Rights Act of 1964, as amended, which prohibits discrimination on the basis of race, color, religion, sex and national origin.

## The Age Discrimination in Employment Act of 1975

Waubonsee Community College is in compliance with The Age Discrimination in Employment Act of 1975, as amended, which prohibits discrimination on the basis of age.

## Title IX

Waubonsee Community College adheres to the provisions outlined in Title IX of the 1972 Federal Education Amendment Act prohibiting sex discrimination and sexual harassment in all activities of the college. The Title IX coordinator is Michele Needham, Executive Director of Human Resources (see directory).

## Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act of 1973

Waubonsee Community College follows the provisions of ADA and Section 504 of the Rehabilitation Act of 1973 that prohibit discrimination on the basis of an individual's disability and offers to disabled persons the opportunity to participate fully in all educational programs and activities. The ADA and Section 504 coordinator is Michele Needham, Executive Director of Human Resources (see directory).

## Family Educational Rights and Privacy Act (FERPA)

For more information on how FERPA governs the disclosure of student records, visit www.waubonsee.edu/ferpa.

## Student Right to Know and Campus Security Act of 1990

Waubonsee Community College is in compliance with the Student Right to Know and Campus Security Act (P.L. 101-542). Information is collected to provide institutional graduation rates, as well as safety policies and crime statistics to students. Further information is available through Waubonsee's Campus Police Department (see directory) or online at www.waubonsee.edu.

## Annual Security and Disclosure Report

The Waubonsee Community College Annual Security and Disclosure Report is available to all students, faculty and staff in compliance with the Jeanne Clery Disclosure of Campus Security Policy and Crime Statistics Act, as well as the Student Right to Know Act, Violence Against Women Act, Drug-Free Schools and Communities Act, Higher Education Opportunity Act, Title IX, and Illinois Abused and Neglected Child Reporting Act. It contains information on campus security measures, alcohol/ drug policies and sanctions, and retention and graduation rates. The report is available online at www.waubonsee.edu/safety.

## Illinois Abused and Neglected Child Reporting Act

 In accordance with the Abused and Neglected Child Reporting Act (ANCRA) all personnel of higher education institutions are mandated to report cases of suspected child abuse or neglect to the Department of Children and Family Services (DCFS) toll-free, 24-hour Child Abuse Hotline at 1-800-25-ABUSE (22873).
## Violence Against Women Act (Reauthorized, 2013)

This Federal law requires colleges to annually train new students and employees about the campus climate related to sexual assault, dating violence, domestic violence, and stalking, as well as the crimes in the Annual Security Report. A handout for victims of these crimes can be obtained from the offices of Counseling staff, Dean of Counseling and Transfer Services, Dean for Students, or the Vice-President of Student Development. Educational sessions regarding safety, bystander education, and sexual misconduct prevention will be ongoing and announced on mywcc.

## WAUBONSEE <br> your mentors

Staff

## Full-Time Faculty and Administrators

## Instructional Divisions:

(BCT) Business and Career Technologies
(C, H\&FA) Communications, Humanities and Fine Arts
(DE \& CR) Developmental Education and College Readiness
(HP \& PS) Health Professions and Public Service
(M\&S) Mathematics and Sciences
(SS, E \& WL) Social Sciences, Education and World Languages
Abbott, Lenice, Associate Professor
Reading (DE \& CR)
BA, Wheaton College;
MS, National Louis University
Aguilar, Juan, Instructor
Heating, Ventilation \& Air Conditioning (BCT)
AAS Joliet Junior College
Archos, Vaseliki, Assistant Professor
Communications (C, H \& FA)
BA, MS, Illinois State University
Armitage, James, Professor
Automotive Technology (BCT)
AS, Waubonsee Community College;
AAS, Elgin Community College;
BS, Illinois State University; MSEd, Northern Illinois University
Master Automotive ASE
Augustine, Pamela, Instructor
(HP \& PS)
BSN, Northern Illinois University;
BA, Multnomah Bible College;
MSN, Lewis University
Avilés-Davis, Evelyn Z., Bilingual Counselor/ Associate Professor

BA, MA, University of Puerto Rico
Ballee, Shawn, Assistant Professor
Industrial Systems Technology (BCT)
AS, Elgin Community College;
BS, Northern Illinois University
MEd, Concordia University
Barreto, David, Counselor/Assistant Professor
AA, Triton Community College;
BA, Concordia University;
MA, Roosevelt University;
MA, Adams State University
Bartel, Kathleen, Librarian
BA, Lake Forest College
MLS, Dominican University
Barto, Robert, Chief Advancement Officer
Advancement
BS, Eastern Michigan
MA, Webster University

Beer, David, Assistant Dean
Business and Career Technologies
BS, Roosevelt University
MS, National-Louis University
EdD, National-Louis University
Beltramini, Allison, Associate Professor
Communications (C, H \& FA)
BA, Lewis University;
MA, University of Illinois at Chicago
Bickley, Keith, Assistant Professor
Philosophy (SS, E \& WL)
BA, Wabash College;
MA, Duquesne University
Bitterman, John C., Associate Professor
Communications (C, H \& FA)
AA, College of DuPage;
BA, Southern Illinois University;
MA, MSEd, Northern Illinois University
Blacksmith, Lourdes, Director
Government and Community Engagement
AAS, Waubonsee Community College;
BA, DePaul University;
MS, Northeastern Illinois University;
EdD, Benedictine University
Boudreau, Charles, Director Student Financial Aid Services
BA, MSEd, University of Illinois;
PhD, University of South Florida
Brooks, Pamela, Assistant Professor
Nurse Assistant/Allied Health (HP \& PS)
BSN, Aurora University
Brown, Maribeth, Assistant Professor
Mathematics (DE \& CR)
BA, Eastern Illinois University;
MA, DePaul University
Burke, Adam, Librarian/Assistant Professor
BA, University of Wisconsin;
MA, University of Iowa
Butler, Mary Edith, Dean
Mathematics and Sciences
BS Ed, Mississippi College;
MLS, University of Mississippi
Caponi, Kimberly, Director
Presidential Communications and Operations
BA, Union College
MA, Antioch University McGregor
Carbajal-Romo, Rosaura, Bilingual Counselor/
Assistant Professor
BS, University of Illinois at Chicago;
MA, Roosevelt University

## Cardine, Darla, Assistant Vice President

Finance
AS, Kishwaukee Community College;
BS, Northern Illinois University;
MBA, Aurora University;
CPA
Chaaban, Amy L., Assistant Professor
Information Systems (BCT)
BS, Emporia State University;
MEd, Southwestern College
Christensen, Nancy, Assistant Professor
Chemistry (M \& S)
BS, University of Wisconsin at Stevens Point;
Ph.D., University of British Columbia
Clark, Gary, Professor
English (C, H \& FA)
BA, Olivet Nazarene College;
MA, Northern Illinois University
Clem, Billy E., Jr., Associate Professor
English (C, H \& FA)
BA, Culver-Stockton College;
MA, Southwest Missouri University
Coburn, Catherine, Assistant Professor
Interpreter Training/Sign Language (HP \& PS)
BS, MA, Northern Illinois University
Corrigan, Christine, Dean
Online Learning and
Center for Teaching, Learning and Technology
BS, Western Illinois University
MA, University of Phoenix
Collins, Catherine, Professor
Accounting (BCT)
BBA, St. Joseph's College;
MS, University of Wisconsin-Milwaukee;
MBA, Northern Illinois University; CPA

Crawford, Mark A., Associate Professor
Mathematics ( M \& S)
BA, MA, Western Michigan University
Cunningham, Christopher, Assistant Professor Mathematics (M \& S)

BS, University of Michigan;
MS, Cornell University
Dale, Marc, Jr., Director
Registration and Records/Registrar
BA, Purdue University;
MA, Chicago State University
Dharmasankar, Sowjanya, Assistant Professor
Economics (SS, E \& WL) BA, MA, M.S. University, Baroda, India
Diaz, Ulysses, Bilingual Counselor/Assistant Professor BA, Northern Illinois University; MSW, University of Illinois at Chicago

Diez, Carla, Associate Professor
Early Childhood Education (SS, E \& WL)
BS, MS, University of Wisconsin-Stout
DiVietro, Jamey, Counselor/Assistant Professor
BA, North Central College;
MA, Loyola College of Maryland
Dixon, Jeri, Dean
Adult Education
BA, Chicago State University; MAEd, National-Louis University

Dosch, Tracey, Associate Professor
Biology (M \& S)
BS, Southern Methodist University;
MS, Ohio State University
Draper, Timothy D., Professor
History (SS, E \& WL)
BS, MA, Ball State University;
PhD, Northern Illinois University
DuCharme, Danielle, Associate Professor
Biology (M \& S)
BS, Loyola University Chicago;
MS, University of California Davis
Erickson, Sharon, Assistant Professor
Nursing (HP \& PS)
BSN, Aurora University;
MSN, Northern Illinois University
Evans, Michelle, Assistant Dean
Health Professions and Public Service
BA, North Central College;
EdD, MSW, Aurora University
Felton, Terence, Chief Information Officer
Information Technology
BS, University of Maryland;
MBA, University of Illinois at Chicago
Field, Ellen, Associate Professor
Mathematics (DE \& CR)
BA, North Central College;
MS, Northern Illinois University
Fozio-Thielk, Lisa A., Associate Professor
Psychology (SS, E \& WL)
AA, Triton College;
BA, MS, National Louis University;
PhD, MA, Northcentral University
Frankel, Amy, Associate Professor
Mathematics (M \& S)
BS, Benedictine University;
MS, Northern Illinois University

Fu, John, Professor
Graphic Design (BCT)
BFA, Shanghai Teacher's University;
MA, MFA, Northern Illinois University
Fuller, Teri A., Assistant Professor
English (DE \& CR)
BA, University of St. Francis;
MA, Northern Illinois University
Gaff, Janet, Assistant Professor
English (DE \& CR)
BA, Purdue University;
Master of Divinity, Bangor Theological Seminary;
MA, Central Michigan University
Garcia, Sharon, Assistant Dean
Communications, Humanities and Fine Arts
BS, North Central College;
MA, Teachers College at Columbia University
Geist, Amanda, Executive Director
Marketing and Communications
BA, North Central College
MBA, Keller Graduate School of Management
Gibbons, Daniel, Associate Professor
Accounting (BCT)
BS, Northeastern Illinois University;
MS, MAS, Northern Illinois University;
CPA
Gloudeman, Mark, Assistant Professor
Welding Technology (BCT)
AGS, Waubonsee Community College;
AWS Certified Welding Inspector;
AWS Certified Welding Educator
Gorski, Kathleen, Assistant Dean
Outcomes Assessment
BA, Valparaiso University
MAEd, University of Illinois
EdD, Argosy University
Gore, Barbara J., Assistant Professor
Chemistry (M \& S)
BS, Michigan State University;
MS, Purdue University
Grier, Douglas, Dean
Community Education
BA, Pennsylvania State University;
MA, Bowling Green State University
MS, Roosevelt University
Hartmann, Bruce, Director
Accounting/Business Services
BA, Carthage College;
MBA, Benedictine University
Heinrich, Joseph, Assistant Professor
Criminal Justice (HP \& PS)
AS, Oakton Community College;
BA, Aurora University;
MEd, National-Louis University

## Heiss, David, Professor

Physical Education (SS, E \& WL)
AA, Eastern Wyoming College;
BS, Bemidji State University;
MSEd, Chicago State University
Hines, Randall, Assistant Professor

## CADD (BCT)

AAS, Southern Illinois University;
BS, Eastern Illinois University;
MPM, Keller Graduate School of Management

Hladik, Paula Jean, Professor
Business (BCT)
RRT, AS, College of DuPage;
BS, College of St. Francis;
MS, MBA, Benedictine University
Hodur, Katherine, Instructor
Nursing (HP \& PS)
BSN, Marquette University
MSN, Lewis University
Hollenback, Scott, Associate Professor
Psychology (SS, E \& WL)
BA, Marquette University;
MA, Forest Institute of Professional
Psychology
Holmes, Harold (Rodney), Associate Professor
Biology (M \& S)
BS, Abilene Christian College;
MS, Purdue University;
PhD, University of Oklahoma
Hoshaw, Justin, Assistant Professor
Biology (M \& S)
BS, University of Wisconsin-Madison;
MS, University of Minnesota
Jeppesen, James Douglas, Associate Professor
Art/Ceramics (C, H \& FA)
BA, BFA, University of Tulsa;
MFA, Northern Illinois University
Jindal, Pratima, Assistant Professor
Physics (M \& S)
MS, PhD, Panjab University
Kecskés, Gary, Assistant Vice President
Workforce Solutions/Community Learning BS, BA, MA, Lawrence Technological University

Kewin, Therese A., Counselor/Associate Professor BS, Illinois State University;
MS, National Louis University
Kiefer, Richard, Professor
Political Science/History (SS, E \& WL)
BS, Miami University;
MA, Governors State University

Kindelin, Heidy, Counselor/Associate Professor
Access Center for Disability Resources
AA, Moraine Valley Community College;
BS, Illinois State University;
MA, Northern Illinois University;
CRC
Krueger, Laurel, Assistant Professor
Nursing (HP \& PS)
AAS, Waubonsee Community College;
BSN, MSN, Lewis University
Kunz, Kenneth, Professor
Automotive Technology (BCT)
AA, Joliet Junior College;
BA, Governors State University;
MEd, Olivet Nazarene University;
Master Automotive ASE
LaCost, Heather A., Professor
Psychology (SS, E \& WL)
BA, Carthage College;
MA, PhD, Northern Illinois University
Larsen, Daniel, Director
Campus Operations
BS, University of Montana;
MBA, Loyola University
LaShure, Faith, Dean
Enrollment Management
BS, MS, Illinois State University
Lathan, Mark, Assistant Professor
Music (C, H \& FA)
BM, Northern Illinois University; MA, PhD, University of California, Los Angeles
Laufenberg, Todd, Assistant Professor
English (C, H \& FA)
BA, University of Illinois;
MA, Northern Illinois University
Lawler, Aaron, Instructor
Humanities (C, H \& FA)
BA, MA, North Central College
MEd, Concordia University
Limbrunner, Tracy, Assistant Professor
Nursing (HP \& PS)
BS, Illinois Wesleyan University;
MS, Northern Illinois University
Lindeen, Ellen, Professor
English (C, H \& FA)
BS, University of Wisconsin-Madison;
MA, Northwestern University
Lindquist, Michelle, Assistant Professor
English (DE \& CR)
AA, Rock Valley Community College;
BA, MA, Northern Illinois University

Livingston, Kimberly Rainsford, Assistant Professor
English (C, H \& FA)
BA, Western Illinois University;
MA, Western Michigan University
Luxion, Clifford, Associate Professor
Real Estate/Construction Management (BCT)
AA, AS, AAS, Waubonsee Community College;
BA, Governors State University;
MSRE, Roosevelt University;
MS, The John Marshall Law School;
Illinois Real Estate Pre-License Instructor
MacDonald, Andrew, Assistant Professor
Auto Body Repair (BCT)
AAS, Waubonsee Community College;
ASE, Master Collision Repair/Refinish Technician
Mattern, Joshua, Assistant Professor
English (DE \& CR)
BA, North Central College;
MA, Northern Illinois University
McDonald, Jeanne, Professor
English (C, H, \& FA)
BA, MA, Lincoln Christian College and Seminary;
MA, Western Illinois University;
PhD, Illinois State University
Metych III, John, Assistant Dean
Social Sciences, Education and World Languages
MEd, University of Illinois
BA, Illinois Benedictine College
Mendoza, Lilia, Assistant Professor
Foreign Language (SS, E \& WL)
BA, St. Norbert College;
MA, Northern Illinois University
Menez, Jessica, Assistant Dean
Developmental Education and College Readiness
BA, Northeastern Illinois University
MA, Northern Illinois University
Modaff, Lawrence, Professor
Communications (C, H \& FA)
BS, Illinois State University;
MA, Northern Illinois University
Montgomery, Andrea, Instructor
Fire Science/Emergency Medical Technician, (HP \& PS) BA, Aurora University
Moran, Michael, Instructor
Human Services (HP \& PS)
BS, Loyola University
MA, Roosevelt University
Morgan, Melissa, Instructor
Mathematics (DE \& CR)
BS, MS, University of Minnesota

Moriarty, Timothy, Assistant Professor
Information Systems (BCT)
BS, University of Illinois at Urbana-Champaign;
MS, DePaul University;
MBA, University of Chicago Booth School of Business
Murray, Suzette, Assistant Vice President
Career and Technical Education
AA, College of DuPage;
BA, MBA, DePaul University
Nakaji, Denise, Professor
Therapeutic Massage (HP \& PS)
BFA, MSEd, Northern Illinois University;
NCTMB
Needham, Michele, Executive Director
Human Resources
BS, University of Illinois;
Certificate of Human Resources Management;
MBA, Benedictine University
Norris, Lesa, Dean
Workforce Development
BA, University of Iowa;
MS, Benedictine University
Nyhammer, Diane, Vice President
Educational Affairs
BA, Barat College;
MA, Northern Illinois University;
PhD, Loyola University
O'Connell-Knuth, Linda M., Assistant Professor
Early Childhood Education (SS, E \& WL)
BS, Iowa State University;
MA, National-Louis University
O'Gorman, Michael J., Professor
English (C, H \& FA)
AA, Elgin Community College;
BA, Truman State University;
MA, University of Illinois at Chicago;
MA, Northern Illinois University
Olson, Paul C., Professor
Sociology/Anthropology (SS, E \& WL)
BA, Oakland University;
MA, University of Michigan
Ortiz, Laura, Dean
Social Science, Education and World Languages (SS, E \& WL)
BA, Iowa State University;
MA, Roosevelt University;
EdD, Benedictine University
Paparozzi, Diana, Assistant Professor
Nurse Assistant (HP \& PS)
AA, County College of Morris;
BSN, Aurora University
Perez, Cynthia, Assistant Professor
Health Care Interpreting (HP \& PS)
AA, College of DuPage

Paver, Jonathan, Assistant Vice President
Transfer and Developmental Education
BA, Western Illinois University
MA, Trinity Divinity School
EdD, Northern Illinois University
Peska, Scott, Dean
Students
AA, Highland Community College;
BS, MS, Illinois State University;
EdD, University of Illinois at Urbana-Champaign
Popowitch, Mark, Assistant Professor
Music, (C, H \& FA)
BA, Northern Illinois University;
MA, Southern Illinois University
Portincaso, Daniel, Assistant Professor
English, (C, H \& FA)
BA, Columbia College;
MA, Lesley University
Powers, Amy, Associate Professor
History (SS, E \& WL)
BA, Grove City College;
MA, John Carroll University;
PhD, Northern Illinois University
Quillen, David, Executive Vice President
Finance and Operations
BS, Augustana College;
MBA, University of Iowa;
CPA
Quirk, Sarah A., Associate Professor
English (C, H \& FA)
BA, DePaul University;
MA, Northern Illinois University
Rambish, Medea, Dean
Developmental Education and College Readiness BA, MAEd, Pennsylvania State University; EdD, Widener University
Randall, Kathleen A., Associate Professor
Education (SS, E \& WL)
AA, Joliet Junior College;
BS, MS, Illinois State University
Randall, Stacey, Dean
Institutional Effectiveness
BA, Millikin University;
MA, PhD, Northern Illinois University
Reardanz, Judy, Assistant Professor
Allied Health (HP \& PS)
BSN, Duquesne University
Rolison, Patrick, Assistant Professor
Criminal Justice (HP \& PS)
AAS, Waubonsee Community College;
BA, University of Illinois at Chicago;
MS, Northern Illinois University

Rothschild-Massa, Jacqueline N., Professor
Psychology (SS, E \& WL)
AAS, Illinois Central College;
BS, MA, Bradley University;
EdD, Illinois State University
Ruetsche, Charles, Assistant Professor
Manufacturing Technology (BCT)
BS, MS, Northern Illinois University;
Saccone, Patricia, Associate Professor
Health Information Technology (HP \& PS)
BA, St. Mary's College;
MA, Concordia University
Santillan, Kristin, Counselor/Assistant Professor
AS, Waubonsee Community College;
BA, Illinois State University;
MSEd, Northern Illinois University
Schafernak, Jennifer, Assistant Professor
Communications (C, H \& FA)
BS, MS, Southern Illinois University;
MA, Northern Illinois University
Schoolfield, Marjorie L., Assistant Professor Nursing (HP \& PS)

AA, Waubonsee Community College;
BSN, MSN, Lewis University
Schulze, Karl, Associate Professor
Earth Science (M \& S)
BS, Northern Illinois University;
MS, Texas A\&M University
Scott, Jamal, Vice President
Strategic Development
BS, University of Wisconsin-Oshkosh;
MA, Illinois Institute of Technology;
EdD, Illinois School of Professional Psychology
Sedgwick, Jo Lynn, Assistant Professor
Mathematics (DE \& CR)
AS, Elgin Community College;
BA, North Central College;
MS, University of Illinois at Chicago
Showalter, Jennifer, Assistant Professor
Biology (M \& S)
BS, Indiana Wesleyan University;
MS, Rush University
Siekierski, Andrea, Instructor
Health Information Technology (HP \& PS)
BA, University of Toledo;
BA, Michigan State University
Sinclair, Kelli, Dean
Counseling, Career and Student Support
BA, MSEd, Northern Illinois University

[^6]Smogur, Monica, Instructor
Nursing (HP \& PS)
BS, MS, Olivet Nazarene University
Sobek, Christine J., President
BA, Purdue University;
MA, Michigan State University;
EdD, Northern Illinois University
Sparr, Cynthia, Dean
Communications, Humanities, and Fine Arts
BA, MSEd, Northern Illinois University
Stach, Marilee, Librarian/Assistant Professor
BA, Western Illinois University;
MLS, Dominican University
Stahl, Lorrie, Assistant Dean
Mathematics and Sciences
BS, MS, Tarleton State University
Stepney, Ne'Keisha, Assistant Dean
Business and Career Technologies
BBA, MBA, Benedictine University
Stuckey, Martine, Professor
Art/Painting/Drawing (C, H \& FA) BA, MFA, Queens College, C.U.N.Y.

## Tejada, Melinda, Vice President

Student Development
BS, Murray State University;
MS, George Williams College;
EdD, Northern Illinois University
Thomas, Katherine, Assistant Professor
Interpreter Training/Sign Language (HP \& PS)
BS, Northern Illinois University
Thompson, Jane, Associate Professor
Mathematics (DE \& CR)
BS, Manchester College;
MS, Clemson University
Tiberio, Guy, Assistant Professor
Automotive Technology (BCT)
AAS, Waubonsee Community College;
BS, Southern Illinois University;
MA, Governors State University
Master Automotive ASE
Tolappa, Maya, Assistant Professor
Information Systems (BCT)
BS, University of Delhi;
MS, Northern Illinois University
Tonioni, Renee, Assistant Vice President
Online Learning and Instructional Support AA, Illinois Valley Community College;
BA, Illinois State University;
MA, Governors State University;
EdD, Aurora University

## Toussaint, Jess, Dean

Health Professions and Public Service
BS, Benedictine University;
MS, University of Illinois at Chicago;
EdD, Benedictine University
Trunkhill, William, Professor
Mathematics (M \& S)
BS, University of Wisconsin-Whitewater;
MS, Northern Illinois University
Vemu, Sheela, Assistant Professor
Biology (M \& S)
BS, University of Madras;
PhD, Chicago Medical School
Virumbrales, Nancy F., Assistant Professor
Foreign Language (SS, E \& WL)
BA, Ohio State University;
MA, University of Wisconsin
Voorhees, David, Associate Professor
Earth Science/Geology (M \& S)
BA, University of Rochester;
MS, Rensselaer Polytechnic Institute
Ware, Leatha P., Professor
Business (BCT)
BS, Tougaloo College;
MS, National-Louis University;
EdD, Northern Illinois University
Weber, Heather, Assistant Professor
Art (C, H \& FA)
BA, Miami University;
MA, Northern Illinois University
Weiss, Alfred W., Assistant Professor
Earth Science/Geography (M \& S)
BA, BS, MS, Southern Illinois University at Carbondale
Westman, Kathleen, Associate Professor
Sociology (SS, E \& WL)
BA, MSEd, MA, Northern Illinois University
Wingate, Constance, Assistant Professor
Nurse Assistant (HP \& PS)
AAS, Waubonsee Community College;
BSN, Aurora University;
MAT, Rockford College
Wu, John, Director
Emergency Management and Safety
BS, State University of New York;
MBA, Regis University;
NIMS Certified
Zusman, Steven, Assistant Professor
Philosophy (SS, E \& WL)
BS, University of Notre Dame;
MA, University of Illinois at Urbana-Champaign

## President Emeritus

Swalec, John J., President Emeritus
BS, MS, PhD, Illinois State University

## Professors Emeritus

Bakalis, Maria, Professor Emerita
Communications/Theatre
BA, DePaul University;
MA, Northeastern Illinois University;
EdD, Northern Illinois University
Ball, David C., Professor Emeritus
CAD/Drafting/Engineering
BS, Western Illinois University;
MEd, National College of Education
Brackenridge, Eugenia, Professor Emerita
Biology/Microbiology
BA, MA, PhD, University of Texas at Austin

## Chapman, Pamela J., Professor Emerita

Information Systems
AA, Wright Junior College;
BS, MS, Northern Illinois University
Clark, Lynn M., Professor Emerita
Interpreter Training/Sign Language
BS, University of Illinois;
MA, Michigan State University;
PsyD, Chicago School of Professional Psychology
de Boom, Patricia, Professor Emerita
Nursing
BSN, Madonna University;
MSN, Boston College
Duckwiler-Lippold, Carol, Professor Emerita
Administrative Office Systems
AA, Spoon River College;
BS, MS, Western Illinois University
Easton, David, Professor Emeritus
Information Systems (BCT)
AAS, Morton College;
BA, University of Illinois;
MBA, Dominican University
Fortier, Diana L., Professor Emerita
Economics/Business (SS, E \& WL)
BA, Rockford College;
MA, Northern Illinois University
Gaudio, John J., Professor Emeritus
Mathematics
BS, MS, University of Illinois
Goetz, Carla, Professor Emerita
Nursing
AA, Oakton Community College;
RN, Augustana Hospital School of Nursing;
BSN, Barat College/University Health Sciences,
The Chicago Medical School;
MSN, EdD, Northern Illinois University

Gruben, John, Professor Emeritus
Manufacturing Technology
AA, Rock Valley College;
BS, MS, Northern Illinois University
Hauser, Raymond E., Professor Emeritus History

BS, Western Illinois University;
MA, CAS, PhD, Northern Illinois University
Knapp, Charles J., Professor Emeritus
Business and Economics
BS, MBA, MSEd, Northern Illinois University;
MST, University of Wisconsin-Whitewater
Lippold, Neal W., Professor Emeritus
Criminal Justice
AAS, Waubonsee Community College;
BA, Aurora University;
MS, Chicago State University
Murphy, David, Professor Emeritus
Psychology
BS, MA, Eastern Illinois University;
EdD, Northern Illinois University
Shaddle, Susan, Professor Emerita
Nursing
BSN, MSN, Loyola University;
CCRN;
EdD, Northern Illinois University
Sprague-Williams, Janet L., Professor Emerita Speech

BA, MA, CAS, EdD, Northern Illinois University
Wampach, Jeanette E., Professor Emerita
Nursing
BS, University of Illinois;
MS, EdD, Northern Illinois University; OCN

Ward, Daniel W., Professor Emeritus
Biology
BS, MS, Central Missouri State University

## Posthumous Professor Emeritus

Miles-Sawka, Sue L., Professor Emerita
Early Childhood Development
BA, Sam Houston State Teachers College, Texas;
MS, University of Houston;
EdD, Nova University
Monokoski, S. Gibson, Professor Emeritus
Music/Instrumental
BM, MM, Northern Illinois University

## Administrative Offices

## ACCESS CENTER FOR DISABILITY RESOURCES

Dean: Kelli Sinclair
Manager: Emily Hinton
Egner, Lisa | Accommodations Coordinator
Rische, Daniel | Accommodations Specialist

## ADMISSIONS

Dean: Faith LaShure
Manager: Joy Sanders
Barr, Felicity | Admissions Administrative Assistant Bechtold, Betty | Admissions Data Administrative Assistant Goode, Keith | Admissions Advisor
Janick, Lydia | International Admissions Advisor
Koehler, Imelda | College Success Advisor
Olson, Stacey | Admissions Advisor
Renner, Amy | Admissions Data Administrative Assistant
Suarez, Carlos | Admissions Advisor

## ADULT EDUCATION

Dean: Jeri Dixon
Holladay-Baxter, Gale| Adult Education Data and Compliance Manager
McDaid, Michaela | Adult Education Faculty Manager
Sanchez, Margarita | Adult Education Administrative Assistant
Saucedo, Eduardo | Administrative Specialist Adult Education
Vazquez, Edith | Adult Education Administrative Assistant
Vacant | Adult Education Special Programs Manager

## ADVANCEMENT OFFICE

Chief Advancement Officer: Robert Barto
Carreno, Stephanie | Advancement Associate
Foster, May | Administrative Specialist Advancement

## ATHLETICS

Dean: Dr. Scott Peska
Manager: Kevin Vest
Betustak, Timothy | Athletics Facilities Specialist
Jacobs, Phillip | Athletic Trainer
VandeKerkhoff, Suzanne | Athletics Administrative Assistant Wagner, Dana | Assistant Athletic Manager

## BOOKSTORE

Director: Bruce Hartmann
Manager: David Gliva
Budzynski, Bonita | Lead Cashier
Gunsteen, Kelly | General Merchandise Buyer
Lemus, Ana | Assistant Manager
Lopez, Ofelia | Senior Bookstore Clerk
Nickels, Phyllis | Bookstore Shipping/Receiving Clerk
Rogers, Mary Ellen | Bookstore Technology Coordinator
Spizzirri, Valerie | Bookstore Accounting Clerk
Goodman, Elizabeth | Textbook Coordinator

## BURSAR OFFICE

Director: Bruce Hartmann
Manager: Monica Ionutas
Frieders, Linda | Student Accounts Technician Jones, Theresa | Accounts Receivable Clerk

## BUSINESS AND CAREER TECHNOLOGIES

Dean: Ne'Keisha Stepney
Assistant Dean: Dr. David Beer
Chrusciel, Carolyn | Administrative Specialist
Business and Career Technologies
Murray, John | Automotive Technology Lab Coordinator

## BUSINESS OFFICE

Director: Bruce Hartmann
Bicos, Sandra | Payroll and Accounting Specialist Kellen, Michele | Payroll and Accounting Supervisor Wagner, Jennifer | Accounts Payable Associate
Wahler, Grace | Grants Account Specialist
Vacant | Accounts Payable Associate

## CAMPUS SERVICES

## Dean: Faith LaShure

Manager: Diana Foley
Arzola, Angelita | Information Desk Receptionist Bolden, Sherlene | Campus Services Supervisor-Plano Delgado, Esmeralda | Information Desk Receptionist Monzani-Stanek, Liliana | Information Desk Receptionist Rios, Gabriela |Information Desk Receptionist Vargas-Ortiz, Enid | Information Desk Receptionist

## CAMPUS OPERATIONS

Director: Daniel Larsen
Manager: Peter Adams
Manager: Eileen Keeney Garcia
Barkei, Michael | Custodian
Blum, Justin | General Maintenance Mechanic
Cardenas, Saara | Custodian
Castanon, Pablo | Lead Custodian
Chavez, Luis | Custodian
Dalton, Kevin | General Maintenance Mechanic
Flores, Arturo | Lead Custodian
Frederick, Karen | Administrative Specialist Campus Operations
Garcia, Evelia | Custodian
Hart, Joseph | General Maintenance Mechanic
Levine, Scott | General Maintenance Mechanic
Maltas, Andrew | Groundskeeper
McKinney, David | Facilities Operations Specialist
Muiznieks, Michelle | Campus Operations Event Specialist
Nagel, Kurt | Industrial Electrician
Pattinson, Seth | Shipping/Receiving Clerk
Plante, Edward | Chief Plant Operator
Sanchez, Jose | Custodian
Taylor, Linda | Custodian
Tochimani, Denise | Lead Custodian
Torres, Eustaquio | Custodian
Wiercinski, Donald | Campus Operations Purchasing Specialist
Zappia, Joseph | General Maintenance Mechanic
Zappia, Joseph | Lead Groundskeeper

## CAREER DEVELOPMENT CENTER

Dean: Kelli Sinclair
Manager: Julie Bechtold
Clark, Marques | Career Development Advisor
Wolf, Jennifer | Career Development Advisor

## CAREER AND TECHNICAL EDUCATION

Assistant Vice President: Suzette Murray
Dwinnells, Sarah | Administrative Specialist Career and Technical Education
Ford, Toni | Career and Technical Education Coordinator
Gaspar, Alyson | Perkins Grant Project Manager
Warren-Crouch, Sean | Dunham Fund Project Manager

## CENTER FOR TEACHING,

 LEARNING AND TECHNOLOGYAssistant Vice President: Dr. Renee Tonioni
Dean: Christine Corrigan
Manager: Jessica Underwood
Almady, Erin | Instructional Designer/Trainer
Barrett, Spring | CTLT Administrative Assistant
Henson, Sean | Technology Trainer
Pedraza, Leon | Instructional Designer/Trainer
Vacant | Technology Trainer

## COMMUNICATIONS, HUMANITIES AND FINE ARTS

Dean: Cynthia Sparr
Assistant Dean: Sharon Garcia
Baier, Susan | Administrative Specialist Communications/
Humanities/Fine Arts
Vargas, Cecilia | Art Coordinator

## COMMUNITY EDUCATION

Dean: Douglas Grier
Jachna, Barbara | Community Education Program Developer
Russell, Edna | Community Education Administrative Coordinator
Vacant | Community Education Program Developer

## CONNECT4SUCCESS PROGRAM (TITLE V)

Dean: Kelli Sinclair
Manager: Lisa Richardson
Castellanos, Iris | Student Success Coach
Dresden, Natalie | Student Success Coach
Rauter, Sarah | Student Success Coach
Seidelman, Eric | Student Success Coach

## COUNSELING, ADVISING AND TRANSFER CENTER

Dean: Kelli Sinclair
Manager: Douglas Szempruch
Chavez, Leticia | Counseling Services Administrative Assistant Garbelman, Mary | Academic Advisor
Geers, Katie | Counseling Services Administrative Assistant Iniguez, Erika | Academic Intervention Advisor

## COUNSELING, CAREER AND STUDENT SUPPORT

Dean: Kelli Sinclair
Kocunik, Sarah | Graduation and Transfer Coordinator
Martin, Loretta | Administrative Specialist Counseling Services
Watson, Heather | Transfer/Veterans Advisor

## DEVELOPMENTAL EDUCATION AND COLLEGE READINESS

Dean: Dr. Medea Rambish Assistant Dean: Jessica Menez
Landmeier, Charlotte | Academic Support Manager
Vilmin, Karin | Administrative Specialist Developmental Education/College Readiness

## EDUCATIONAL AFFAIRS

Vice President: Dr. Diane Nyhammer
Gebauer, Cynthia | Senior Administrative Coordinator
to Vice President of Educational Affairs

## ENROLLMENT MANAGEMENT

## Dean: Faith LaShure

Geraghty, Bruce | Imaging Data Specialist
Peck, Julie | Administrative Specialist Enrollment Management

## EMERGENCY MANAGEMENT AND SAFETY

## Director: John Wu

Campus Police Chief: J.C. Paez
Cicci, Joseph | Campus Police Officer
Davis, Charles, Jr. | Campus Police Officer
Grossman, Frank | Campus Police Officer
Stefanski, Lawrence, Sr. | Campus Police Sergeant
Wiess, Larry| Campus Police Officer
Yanz, Charles | Campus Police Officer

## FINANCIAL AID

Director: Dr. Charles Boudreau
Manager: Christa Kristich
Baxa, Sarah | Financial Aid Advisor
Del Real, Adalberto | Financial Aid Advisor
Guziec, Allison | Financial Aid Advisor
Luna, Maribel | Financial Aid Advisor
McKeen, Douglas | Financial Aid Administrative Assistant
Phillips, Dashaun | Financial Aid Advisor
Wheeler, Andrea | Financial Aid Veterans Coordinator
Wittman, Victoria | Financial Aid Data Specialist
Vacant | Financial Aid Advisor

## FINANCE AND OPERATIONS

Executive Vice President: David Quillen
Davids, Paula | Senior Administrative Coordinator to Executive Vice President of Finance/Operations

## FINANCE OFFICE

Assistant Vice President: Darla Cardine
Luman, Sally | Finance Administrative Assistant
Orth, Sarah | Finance Systems and Compliance Analyst

## FITNESS CENTER

Dean: Douglas Grier
Manager: Lisbeth Anderson
Anderson, Michelle | Fitness Center Program Coordinator Keifer, Stephanie | Fitness Center Operations Specialist
GOVERNMENT AND COMMUNITY ENGAGEMENT
Director: Dr. Lourdes Blacksmith
Thomas, Kathleen | Administrative Specialist Government and Community Engagement

## HEALTH PROFESSIONS AND PUBLIC SERVICE

Dean: Dr. Jess Toussaint
Assistant Dean: Dr. Michelle Evans
Biard, Debra $\mid$ Healthcare Programs Administrative Assistant
Crafton, Kebra | Administrative Specialist
Health Professions and Public Service

## HUMAN RESOURCES

Executive Director: Michele Needham Barth, Jennifer | Human Resources Specialist Cadena, Yesenia | Employment Manager Depke, Danielle | Human Resources System Analyst Griffin, April | Human Resources Administrative Coordinator Kripp, Kathleen | Senior Human Resources Manager Larkin, Donna | Employment Coordinator
Schmidt, Karen | Human Resources Administrative Assistant
Torres, Diana | Benefits Coordinator
Vacant | Employee Relations Manager

## INFORMATION TECHNOLOGY

Chief Information Officer: Terence Felton Aggarwal, Arvind | Senior Data Center Manager Anthenat, Joseph | Data Center Technology Specialist Briese, Sarah Jo |Information Technology Specialist Chen, Joyce | Database Analyst
Doody, Donna | IT Purchasing Administrative Coordinator
Duffy, Darren | Mobile Technology Specialist
Fier, Michael, Jr. | Computer/Media Services Manager
Fowler, Zachary | Data Center Engineer
Froehlich, Beth | IT Services Manager
Gyoerkoes, Timothy | Coordinator Extension Campuses
Hammond, Benjamin |IT Customer Service Supervisor
Hildebrand, Marjorie | Senior Enterprise Systems Manager
Hively, Ryan | Network Technology Specialist
Kero, Daniel | Voice Systems Supervisor
Kessler, Holly | Administrative Specialist IT
Komal, Amritpal | IT Project Coordinator
Leal, Erik | IT Customer Service Specialist
Marczewski, Christopher | Data Center Engineer
McCune, Charles |IT Customer Service Specialist
Moore, Randall | Web Developer
Munoz, Brenton | Data Warehouse Analyst
Overton, Jackie | Systems Analyst
Parker, Ryan | Media Services Technician
Pike, James | Senior Network Technology Manager
Rquibi, Hassan | Data Center Engineer
Sargent, Karen | Systems Analyst
Schiesl, Tammy | Computer Services Specialist
Stefek, William | Network Technology Coordinator
Strain, Scott | IT Specialist Extension Campuses
Subick, Suzette | Database Analyst
Trivedi, Tarun | Information Security Manager
Wayeshe, Amanda | IT Budget Specialist
Wells, Micah | Media Services Supervisor
Wicker, John | Computer Services Supervisor
Zokan, Barry | Media Services Technology Specialist

## INSTITUTIONAL EFFECTIVENESS

Dean: Dr. Stacey Randall
Assistant Dean: Dr. Kathleen Gorski
Arrington, Kayla | Institutional Effectiveness Data Analyst
Flavin, Shannon | Grants Compliance Manager
Hinkle, Henry | Lead Data Analyst
Mapes, Kristia | Research Reporting Manager
Osman, Kathleen | Grants and Special Projects Analyst

## LIBRARY

Assistant Vice President: Dr. Renee Tonioni
Manager: Vacant
Chan, Debra | Aurora Fox Valley Library Technology Specialist
Chrisman-DeNegri, Jessica | Aurora Downtown Campus
Library Technology Specialist
Hunter-Brodhead, Rhea | Circulation Assistant
Markley, Victoria | Library Cataloging Specialist
Ramirez, Rocio | Aurora Downtown Campus Library Specialist
Vance, Kendall | Resource Sharing Specialist
Wohlers, John | Library Technology Coordinator
Zwergel, Jane | Circulation Assistant

## MATHEMATICS AND SCIENCES

Dean: Mary Edith Butler
Assistant Dean: Lorrie Stahl
Ragsdale, Katherine | Biology Lab Coordinator
Wall, Katherine | Chemistry Lab Coordinator
Wilson, Kerri | Administrative Specialist
Mathematics and Sciences

## MARKETING AND COMMUNICATIONS

## Executive Director: Amanda Geist

Manager: Stephanie Wennmacher
Scott Domanski | Digital Marketing Manager
Edmonson, Meghan | Publications Coordinator
Feiza, Jamie | Marketing and Communications Assistant
Gehrig, Marcia | Graphic Designer/Marketing Coordinator
Haugen, Linda | Marketing/Communications Event Coordinator
Lindell, Anders | Marketing/Communications Web Developer
Morrison, Mary | Marketing/Communications Coordinator
Punter, Adam | Photographer/Visual Media Coordinator
Vacant | Marketing/Communications Content Coordinator

## ONLINE LEARNING AND <br> INSTRUCTIONAL SUPPORT

Assistant Vice President: Dr. Renee Tonioni
Dean: Christine Corrigan
Manager: Patricia Brueschke
Baker, Brandy |Administrative Specialist
Online Learning and CTLT
Diederich, Kelly | Instructional Services Coordinator Eberlein, Amanda | Administrative Specialist

Online Learning and Instructional Support
Foster, Christopher | Video Production Specialist
Hornkohl, Stephanie | Online Learning Specialist
Lara, James | Video Production Specialist
Lyons, Terry | Instructional Services Administrative Assistant
Magara, James $\mid$ Educational Television \& Video
Production Manager
Malley, Loretta | Instructional Services Manager
Mejia, Victor | Public Access Video Production Specialist
Rennels, Michael | Public Access Programming Manager

## PRESIDENT'S OFFICE

President: Dr. Christine Sobek
Director Presidential
Communications and Operations: Kimberly Caponi
Baccheschi, Mary | Executive Administrative
Coordinator to President
Barraza, Maria | Administrative Specialist Office of the President Jones, Ronna | Administrative Specialist Office of the President

## PURCHASING

Assistant Vice President: Darla Cardine
Manager: Theresa Larson
Twait, Sibylle | Purchasing Administrative Coordinator

## REGISTRATION AND RECORDS

Dean: Faith LaShure
Registrar: Marc Dale, Jr.
Manager: Jill Pierson
Anderson, Justine | Registration/Records Administrative Assistant Babb, Maggie | Credentials Analyst
Contreras, Nydia | Campus Administrative Assistant
Ferguson, Angela | Campus Administrative Assistant
Flores, Maria Beatriz | Campus Administrative Assistant
Nicholson, Emily | Registration/Records System Analyst
Parks, Susan | Registration/Records Administrative Assistant Raethz, Jennifer | Credentials Analyst
Sparks, Dawn | Registration/Records Administrative Assistant
Vacant | Campus Administrative Assistant

## SOCIAL SCIENCES, EDUCATION AND WORLD LANGUAGES

Dean: Dr. Laura Ortiz
Assistant Dean: John Metych III
Koehring, Janet | Administrative Specialist Social Sciences, Education and World Languages

## STRATEGIC DEVELOPMENT

Vice President: Dr. Jamal Scott
Forney, Kimberly | Senior Administrative Coordinator to Vice President of Strategic Development

## STUDENT ADMINISTRATION

Dean: Dr. Scott Peska
Nuñez, Myrna | Administrative Specialist Student Administration

## STUDENT DEVELOPMENT

Vice President: Dr. Melinda Tejada
Morrow, Dawn | Senior Administrative Coordinator to Vice President of Student Development

## STUDENT LIFE

Dean: Dr. Scott Peska
Manager: Dr. Mary Tosch
Junk, Megan | Student Life Specialist
Lerma, Lina | Student Life Administrative Assistant

## STUDENT SUPPORT SERVICES

Dean: Kelli Sinclair
Manager: Frankie Benson
Jensen, Sandra | TRIO/
Student Support Services Educational Advisor

## TESTING SERVICES

Dean: Dr. Scott Peska
Manager: Erica Reyes
Horton, Nancy | Testing Services Department Coordinator
Kummerer, Jo Ellen | Assessment Program Specialist Academic Testing
Langerveld, Julie | Testing Services Administrative Assistant
Patino-Lemus, Sandra | Assessment Technology Specialist
Walder, Ann | Assessment Program Specialist -
External Testing and Training
White-Shepard, Kisha | Testing Services Department Coordinator
Vacant |Assessment Program Specialist - Specialized Testing

## TRANSFER AND DEVELOPMENTAL EDUCATION

Assistant Vice President: Dr. Jonathan Paver
Arsenault, Deborah | Administrative Specialist Transfer and Developmental Education
Cofield, Robert | High School Partnerships Manager
Vacant | High School Partnerships
Administrative Coordinator

## UPWARD BOUND

Dean: Kelli Sinclair
Manager: Robert Cook
Sherretz, Chassie | Upward Bound Educational Advisor

## WORKFORCE DEVELOPMENT

Dean: Lesa Norris
Cherry, Grace | Operations Specialist Corral, Amanda | Operations Specialist
Drake, Kelly | Driver Safety Program Specialist
Flores, Kelly | Driver Safety Program Specialist
James, Jennifer | Program Developer
Parker, Harriet | Account Representative
Riley, Kevin |Account Representative
Rojas, Edith | Administrative Specialist Workforce Development
Schmidt, Dennis | Driver Safety Program Manager
Smith, Gary | Workforce Training Manager
Williams, Andre | Account Representative

## WORKFORCE SOLUTIONS/

COMMUNITY LEARNING
Assistant Vice President: Gary Kecskés
Scalpelli, Ellen | Administrative Specialist
Workforce Solutions and Community Learning

## WAUBONSEE

your learning environment

## Facilities and Extension Locations

## Sugar Grove Campus

The Sugar Grove Campus includes the Student Center, which houses admissions, counseling, financial aid, the café and coffee bar, and other student services; the Field House/Erickson Hall, which houses the gymnasium and the fitness center; the Auditorium; Collins Hall, which houses the library; Akerlow, Bodie, Von Ohlen and Weigel Halls, which house classrooms and faculty offices; the Science Building; the Henning Academic Computing Center, which houses the computer laboratory and computer instruction classrooms; the Academic and Professional Center, which houses the Event Room; Dickson Center, which houses the bookstore and administrative offices; Campus Operations; Building A, which houses administrative offices; Ceramics Building; Auto Body; and various athletic fields. See the map on following pages. Also see the directory at the back of this catalog. Parking lots are provided at no cost to the student. Parking regulations are posted throughout the campus.

Consult the current schedule of classes or website for the hours of operation for all campus services.

## Aurora Downtown Campus

Waubonsee's Aurora Downtown Campus is conveniently located at 18 S. River Street. The 132,000 square-foot-building includes classrooms, computer labs, two science labs, other specialized instructional spaces, bookstore, library, early childhood center with playground, Tutoring center, multipurpose meeting rooms, conference room with catering kitchen and grab-and-go café and coffee bar. Free parking is available in Lot W. See the map on following pages.

Comprehensive student services, including admissions, registration, counseling, financial aid and assessment are available at the campus. The Aurora Downtown Campus is also headquarters for Workforce Development, Adult Basic Education, Adult Education Special Programs, the Adult Education Computer Center, ASE/HSE, English as a Second Language and the Adult Literacy Project.

This campus offers transfer courses and career degree and certificate programs, developmental and adult basic education, workforce development, and community education.

## Aurora Fox Valley Campus

As evidence of its strong commitment to the growing demands of District 516, Waubonsee opened its third major extension center in January 1997 on the Rush-Copley Medical Center campus on Route 34 in far east Aurora. Renovated and renamed in 2016, the Aurora Fox Valley Campus houses the college's health care programs, including nursing, phlebotomy, medical assistant, emergency medical technician, nurse assistant and surgical technology. There are also general education course offerings and comprehensive student services. Free on-site parking is available. See the map on following pages.

## Plano Campus

Waubonsee's Plano Campus is located off of Route 34, west of Eldamain Road in Plano. The 33,000 square-foot-building includes classrooms, two science labs (biology and earth science), computer labs and Certified Nurse Assistant (CNA) lab. Free on-site parking is available.

This campus offers transfer courses and career degree and certificate programs, developmental and adult basic education, workforce development, and community education.

## Extension Locations

Student convenience is very important to us at Waubonsee Community College, and so is flexibility.

Because students like to receive their education near where they live and work, the college has committed its resources to expanding the number of educational opportunities available at locations beyond Waubonsee's major campus centers. The college offers a number of college credit courses, community education classes and business seminars at locations close to home.

Each semester, students are able to enroll in a wide range of Waubonsee offerings at nearly 16 different locations across the college district. These Waubonsee extension sites save students travel time, and in some cases, provide the opportunity for students to take basic core education courses necessary for an associate degree without leaving their hometown.

For a complete listing of courses, classes and seminars offered at locations throughout the college district, consult the current semester class schedules.

## Waubonsee on the World Wide Web

Waubonsee's website at www.waubonsee.edu provides a wide range of important and timely information about the college. Members of the college community can find updated class schedules, details about transfer and career programs, a faculty and staff directory, and campus maps. Information about financial aid, registration, athletics programs, student life and services, and general news about the college is also available online.

In addition, the website provides access to mywcc, a personalized campus portal that centralizes student services, records, classes and clubs online. Users with an X-number can sign-in to check email, get important announcements, view grades, pay account balances and more. In addition, mywcc makes class schedules and course materials available anytime, anywhere. Students are encouraged to sign-in regularly to discover frequent enhancements and new resources.

More information about Waubonsee's Web resources is available from the Marketing and Communications office (see directory).

In addition to its many alternative delivery systems for education, Waubonsee also offers online courses, certificates and degrees. See the website for more information, including a current schedule of online courses.


## ILLINOIS COMMUNITY COLLEGE DISTRICT \#516

2016 District population estimate
449,304
Projected population for the year 2025

Illinois Community College District 516 encompasses 624 square miles and includes southern Kane County and portions of Kendall, DeKalb, LaSalle and Will counties. Waubonsee's central campus is in Sugar Grove, about 45 miles west of Chicago. A second campus is in downtown Aurora, a third permanent facility is located on the campus of the Rush-Copley Medical Center, Route 34, Aurora and a fourth campus is in Plano off of Route 34.

## District 516 serves

12 public high school districts
8 private high schools
22 municipalities

Town Name

## ZIP Codes

Within/Partially within district

| Aurora | $60502,60503,60504,60505,606$ |
| :--- | ---: |
| Batavia | 60510 |
| Big Rock | 60511 |
| Bristol | 60512 |
| Elburn | 60119 |
| Geneva | 60134 |
| Hinckley | 60520 |
| Kaneville | 60144 |
| La Fox | 60147 |
| Leland | 60531 |
| Maple Park | 60151 |
| Millbrook | 60536 |
| Millington | 60537 |
| Montgomery | 60538 |
| Mooseheart | 60539 |
| North Aurora | 60542 |
| Oswego | 60543 |
| Plano | 60545 |
| Sandwich | 60548 |
| Somonauk | 60552 |
| Sugar Grove | 60554 |
| Yorkville | 60560 |





## AURORA DOWNTOWN CAMPUS

The campus, located at 18 S . River St., has short-term parking, limited to 15 minutes, which will be strictly enforced. Free student parking is available from 7 a.m. to 10 p.m. in Lot W at 309 N. River St. Students should see Campus Police to receive a free Lot W hang tag. Discounted parking is no longer available in the Stolp Island Garage.

Drop-offs are easily made on the Fox River side of the Aurora Downtown Campus by using the Waubonsee driveway. A Pace Bus Stop is available on Galena Boulevard.

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## Glossary

Academic calendar - important dates for the semester; e.g., registration, add/drop, holidays.
Area of concentration - courses a student takes to build a foundation for intended major or electives to meet credit-hour requirements for a degree.

Assessment - tests in language usage, writing, reading, numerical and algebra skills to determine proper course placement.

Associate degree - awarded to students completing 60-64 semester hours in a particular field of study. Waubonsee awards six associate degrees: arts (AA), science (AS), fine arts (AFA), engineering science (AES), applied science (AAS) and general studies (AGS).

Auditing - taking a class to benefit from the experience without receiving a grade or college credit.

Baccalaureate - bachelor's degree; refers to four-year full-time academic program of study.
Certificate of Achievement - awarded to students completing specific requirements in career/occupational-oriented programs.

Counselor - a professionally trained person who assists students directly with academic, career and personal concerns.

Credit by examination - course credit awarded to students demonstrating knowledge through proficiency or CLEP tests.

Curriculum - group of courses comprising an area of specialization.

Dean - person responsible for an instructional or administrative division.

Degree - academic title given to student signifying completion of a program of study. See "associate degree."

Discipline - area of study such as criminal justice, English or welding technology.

Division - educational or administrative unit of the college. See "instructional division."

Drop a course - specific action taken by a student to withdraw from a class he/she registered for.

E-RAP (Electronic Registration and Planning) - an online program for all new regular students to assist in orientation and course selection.

Extracurricular or cocurricular activities - offered outside the credit curriculum; e.g., intramurals, sports, clubs and social events.

Fee - set amount charged for registration; also an additional set amount for certain activities or courses.

Financial aid - grants, loans, scholarships and student employment to help students pay their way based on financial need and eligibility.

Full-time - student registered for 12 hours or more per semester.
General studies - designed for students taking a broad range of courses and not pursuing either a career education or transfer degree program. Waubonsee offers an Associate in General Studies degree and a general studies certificate.

Grade point - numerical value assigned to the letter grade received in a class. Grade point average is number of grade points earned divided by number of semester hours attempted.

Graduation - completion of coursework required for a degree. Students must petition for graduation.

IAI - Illinois Articulation Initiative; an agreement to facilitate the transfer process among Illinois schools.

Instructional division - grouping of disciplines, Waubonsee has six: Business and Career Technologies; Communications, Humanities and Fine Arts; Developmental Education and College Readiness; Health Professions and Public Service; Mathematics and Sciences; Social Sciences, Education and World Languages
$\boldsymbol{L e c} / \boldsymbol{L a b}$ - number of hours students spend per week in lecture and/or laboratory time in a course.

Part-time - student taking fewer than 12 hours per semester.
Prerequisite - course that must be completed before taking another. Corequisite refers to a course that must be taken in conjunction with another.

Probation - warning that student is not attaining satisfactory academic progress.

Registration - process of completing forms and steps necessary to enroll in classes.

Reverse transfer - student transferring from another college to Waubonsee.

Schedule - periodic publication providing complete schedule of courses and registration process information.

Semester - 16-week class term. Fall semester begins in August and spring semester in January. Summer session also offered.

Semester hour (sem hr) - unit of measurement defining credit awarded for successful completion of a class.

Senior college - four-year institution of higher education offering baccalaureate and higher degrees.

Student Handbook - annual publication explaining college policies, regulations and activities in an easy reference format.

Transcript - official copy of student's academic record obtained from the registrar.

Tuition - cost of attending courses based on the number of semester hours for which student enrolls and on residency.

CAMPUSES
Sugar Grove - Route 47 at Waubonsee Drive | Sugar Grove, IL 60554-9454 | (630) 466-7900
Aurora Downtown - 18 S. River St. | Aurora, IL 60506-4134 | (630) 801-7900
Aurora Fox Valley - 2060 Ogden Ave. | Aurora, IL 60504-7222 | (630) 585-7900
Plano - 100 Waubonsee Drive | Plano, IL 60545-2276 | (630) 552-7900
College Information Center
First Floor, Student Center, Sugar Grove Campus | (630) 466-7900

## Departments

| Department | Building | Extension | Department | Building | Extension |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Access Center for Disability Resources | STC 201 | 2564 | Educational Affairs | COL 132 | 2352 |
|  |  |  | Financial Aid | STC 234 | 5774 |
| Admissions | STC 260 | 5756 |  | DWNTN 241 |  |
| Adult Education Division | DWNTN 457 | 4600 | Fitness Center | ERK 1st floor | 2530 |
| Adult Education Computer Center | DWNTN 454 | 4128 | GED \& TASC Testing | DWNTN 275 | 4182 |
|  |  |  | Graduation | STC 275 | 2371 |
| Adult Education Youth Services | DWNTN 460 | $4176$ | Health Care Programs | FOXVLY 107 | 3901 |
| Adult Literacy Project | DWNTN 460 | 4106 | Health Professions and Public Service Division | FOXVLY 107 | 3900 |
| Advancement Office | DKN 2nd floor | 2316 |  |  |  |
| Athletics | FLD 170 | 2524 | High School Equivalency Preparation Classes | DWNTN 457 | 4600 |
| Basic Skills/HSE | DWNTN 457 | 4600 |  |  |  |
| Bookstore | DKN 1st floor DWNTN 1st Floor | $\begin{aligned} & 4600 \\ & \hline 2908 \\ & 4174 \end{aligned}$ | Honors Program | DKN 224 | 2723 |
|  |  |  | Human Resources | A 110 | 2718 |
| Bursar | STC 2nd floor | 5705 | Learning Assessment and Testing Services | STC 230/DWNTN 275 <br> PLANO 129 <br> FOXVLY 229 | 5700 |
| Business and Career Technologies Division | APC 242 | 2263 |  |  |  |
| Campus Police | DKN 1st floor DWNTN 1st Floor | $\begin{aligned} & 2552 \\ & 4142 \end{aligned}$ | Library | COL 2nd floor DWNTN 1st floor | $\begin{aligned} & 2400 \\ & 4125 \end{aligned}$ |
| Career and Technical Education | A101 | 2356 | Lifelong Learning Institute | COL174 | 2593 |
|  |  |  | Marketing \& Communications | DKN 250 | 2411 |
| Career Development Center | STC 209 | 2368 | Mathematics and Sciences Division | SCI 214 | 2319 |
| Children's Programs | Auditorium 108 | 2360 |  |  |  |
| Communications, Humanities and Fine Arts Division | BDE 136 | 2921 | Online Learning | $\text { COL } 145$ | 2402 |
|  |  |  | President's Office | DKN 2nd floor | 2903 |
| Community Education | Auditorium 108 | 2360 | Registration \& Records <br> Social Sciences, Education and World Languages Division | STC 249 | 2370 |
| Computing Center | HCC/DWNTN 218 | 5723/4124 |  | APC 244 | 5734 |
| Connect4Success (C4S) | DWNTN 113 | 4660 |  |  |  |
| Counseling, Advising and Transfer Center | STC 262 <br> DWNTN <br> FOXVLY by appt. <br> PLANO 126 | $\begin{aligned} & 2361 \\ & 4225 \\ & 2611 \end{aligned}$ | Student Development | STC 134 | 2941 |
|  |  |  | Student Life | STC 126 | 2369 |
|  |  |  | Student Support Services | STC 262 | 5767 |
| Dean for Students | STC 103 | 2349 | Tutoring Centers | COL 144 PLANO Library DWNTN 215 FOXVLY 225 | $\begin{aligned} & 2426 \\ & 2426 \\ & 4227 \\ & 2426 \end{aligned}$ |
| Developmental Education and College Readiness | COL 162 | 5706 |  |  |  |
| Driver Safety | DWNTN 266 | 3675 | Workforce Development | DWNTN 256 | 4152 |

## Official Campus Hours

Official campus hours are hours the campuses are open to the public year-round.
Sugar Grove - 5:30 a.m. - 11 p.m., Monday - Friday | 6:30 a.m. - 11 p.m., Saturday | 8 a.m. - 10 p.m., Sunday
Aurora Downtown - 7:30 a.m. - 10 p.m., Monday - Thursday | 7:30 a.m. - 4:30 p.m., Friday - Saturday
Aurora Fox Valley - 7:30 a.m. - 10 p.m., Monday -Thursday | 7:30 a.m. - 4:30 p.m., Friday - Saturday
Plano - 7:30 a.m. - 10 p.m., Monday - Thursday | 7:30 a.m. - 4:30 p.m., Friday - Saturday

## Campus Closed

The college is closed and services are not available on:

Independence Day: Tuesday, July 4, 2017
Labor Day: Monday, Sept. 4, 2017
Thanksgiving Holiday: Wed., Nov. 22 thru Sunday, Nov. 26, 2017

Winter Holiday: 4:30 p.m., Fri., Dec. 22, 2017 thru
Mon., Jan. 1, 2018
Easter: Sunday, April 1, 2018
Memorial Day: Monday, May 28, 2018

## Sugar Grove

Route 47at Waubonsee Dr.
Sugar Grove, IL 60554
(630) 466-7900

Aurora Downtown
18 S. River St
Aurora, IL 60506
(630) 801-7900

Aurora Fox Valley
2060 Ogden Ave.
Aurora, IL 60504
(630) 585-7900

Plano
100 Waubonsee Dr
Plano, IL 60545
(630) 552-7900


## \% WAUBONSEE


[^0]:    *Students wishing to transfer credits to Waubonsee need to submit official transcripts and complete the online Transcript Evaluation Request Form (TERF) at mywcc.waubonsee.edu. Log in with your X-number and password, select the student tab, go to the student forms box, and select the registration tab to open the form. This step needs to be completed before course placement or Electronic Registration and Planning (E-RAP).

[^1]:    - See course choices listed on pages 72-73.

[^2]:    (c) See directory inside back cover.

[^3]:    There are several Web development certificates and degrees offered by both the Graphic Design and World Wide Web curriculums. The certificate and degree titles in both areas may sound similar, but there are distinct differences between the two. Your own specific background and interest will determine which certificate or degree is best for you. If you are interested in the artistic design of Web pages through the use of design software, design layout techniques, advanced use of multimedia, animation, sound and video, the Graphic Design certificates and programs are appropriate for study. If you are interested in the construction, maintenance and support of Web pages through the use of computer programming and limited Web design software, the World Wide Web certificates and degrees are appropriate. In short, the Graphic Design certificates and degree focus on the design of Web pages, while the World Wide Web certificates and degrees primarily focus on the maintenance and support of websites. Please contact Counseling (see directory) for more specific descriptions of these certificates and degrees and to discuss which one may be most appropriate for you.

[^4]:    PROGRAM TOTAL

[^5]:    (3 lec/0 lab)
    3 sem hrs

[^6]:    Skaggs, Steven, Professor
    Business/Information Systems (BCT)
    BSE, Missouri Southern State University;
    MSE, Missouri State University

